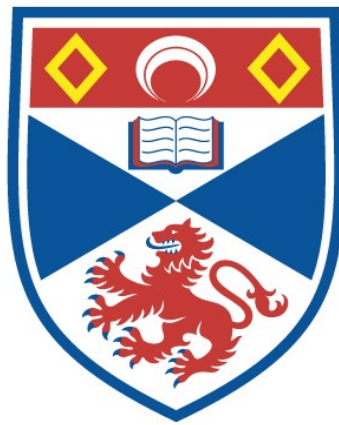


**WHERE ANGELS FEAR TO TREAD :
A TENTATIVE STUDY OF THE LANGUAGE OF
PREHISTORIC BASQUE**

Robin O. Macalister

A Thesis Submitted for the Degree of MPhil
at the
University of St Andrews



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A dissertation submitted to the
Faculty of Arts in candidacy for the degree of

Master of Philosophy

at the University of St. Andrews

Robin O. Macalister.

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ABSTRACT

This work is an investigation into the possible age of part of the lexical content of the Basque language-today a linguistic isolate in the western Pyrenees.

It examines firstly the chronological development of the various fanciful and contradictory theories as to the origins and antiquity of the Basques and their unique tongue with the aim of dismissing these ideas in favour of the prevalent local or Indigenista theory about their origins.

Secondly, by combining linguistics and prehistory, with the archaeological and anthropological background of the region, this work endeavours to uncover possible traces of the pre-metal ages i.e. the Neolithic, Mesolithic and even further back, the Upper Palaeolithic in the roots of the present day vocabulary of Basque.

Archaeologically, there is as yet no concrete evidence which would suggest any sizeable migration into the Franco-Cantabrian zone of foreign peoples who could have brought the Basque language or something of it with them and this is fundamental to the whole argument. As long as there is a lack of archaeological or anthropological proof of any new arrivals into the region strong enough both numerically and culturally to have been capable of imposing a new language onto the native Western Pyrenean people, then the idea that something of the various -lithic ages in the area could still remain embedded in the lower lexical strata of the Basque tongue today could possibly have some foundation.

Admittedly, the immense time-span involved in this argument together with the absence of written records as regards prehistory constitute the main source of criticism of this theory yet the survival of the Basques and their language today testifies to their ability to absorb outside influences and still retain the basic character and structure of their pastoral society which itself is thought to date right back to the Neolithic Pyrenean Culture of the region.

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- (b) I was admitted as a research student under Ordinance No. 12 on 8th October, 1980 and as a candidate for the degree of M.Phil. on 8th October, 1980, the higher study for which this is a record was carried out in the University of St. Andrews between 1980 and 1983.

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ACKNOWLEDGEMENTS.

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TABLE OF CONTENTS

	<u>Page</u>
Declarations	
<u>Introduction</u>	1
The Earliest Evidence of the Basques and their language	2
Theories about the Origins of the Basques	4
The Iberian Theory	5
The Caucasian Theory	7
The Local or "Indigenista" Theory	8
Notes	12
 <u>CHAPTER I - The Palaeolithic Age</u>	 16
The Case for any Remnant of Upper Palaeolithic Vocabulary-	
<u>EIJUR</u>	21
<u>(H)ORMA</u>	22
<u>URRA</u> and <u>INTZAURRA</u>	23
Words for Bracken and Fern	23
<u>IZOTZ</u>	25
<u>(H)UR-UGATZ</u>	26
Words for Trees	26
The Suffix - <u>ATZE</u>	30
Some Words for Fauna	32
Words for Tools and Weapons - <u>HAITZ</u>	35
<u>HORTZ</u>	40
<u>GEZI</u>	42
The linguistic situation during the Late Upper Palaeolithic Age	44
Notes	50
 <u>CHAPTER II - The Mesolithic Age</u>	 54
The Azilian Culture	58
The Azilian Culture and its Artifacts	60
The Asturian Culture	61
The Bow and Arrow	63
The Domestication of the Dog	64
The Mesolithic Fauna	65
Man and where he lived	65
The Mesolithic Floral World	65
The Hazelnut and its Importance to the Mesolithic Economy	70
<u>HERRI</u> and <u>ERRE</u> and the Importance of Forest Firing to a	
Mesolithic Economy	72
ACORNS - <u>(H)EzkurRAK</u> and their Significance to Mesolithic Man	74
<u>ZUR</u> and the Concepts of Wood and Fire	76
<u>(SU)BIL</u> and the Expression of the Concept of Roundness	
in the Basque Language	77
Notes	79

	Page
CHAPTER III - <u>The Neolithic Age</u>	82
Pastoralism and its Introduction into the Pyrenees	83
The Change from Hunting to Pastoralism	87
Possible Candidates for Neolithic Vocabulary in the Basque Language	90
Bones, Lying and Divination	91
The Introduction of Farming	93
The Neolithic Case for the Similarity between (H)ERRI and ERRE	99
HAITZKOR	100
HARITZ and (H)EZKUR	101
The Megalithic Religion in the Basque Country	102
HARRI	106
Notes	108
 <u>The Conclusion</u>	 112
 <u>Bibliography</u>	 116

Where Angels Fear to Tread - a Tentative Study of
the Language of Prehistoric Basque.

Introduction.

The Basque language or Euskera represents the only instance today in Europe of the survival of an indigenous pre-Indo-European language. It has managed to resist the numerous invasions and cultural influences of the last 4,000 years. Although many foreign elements have entered the language over the centuries, it has preserved its peculiar physiognomy to this day.

When trying to investigate something of the vocabulary of Basque like for instance, the possible origins of the usage of certain words, we have very little as regards linguistic records of the language before the middle of the 16th century when Basque literature began with the publication in Bordeaux in 1545 of a small book of religious poetry in Basque entitled Linguae Vasconum Primitiae and written by a French Basque priest, Bernard Dechepare.

There is the risk of error when trying to search into the pre-history of Basque but this does not mean that investigations of this nature are pointless. It was the eminent French linguist and comparatist, F. de Saussure who said, "On ne peut rien tirer du Basque parce que, étant isolé, il ne se prête à aucune comparaison."¹ Admittedly, its linguistic isolation is an obstacle because we cannot compare the phonetic changes which must have taken place in Basque over the centuries with those which occurred in other languages in Europe like Celtic, Germanic or Latin. However, there is evidence although brief, which enables us to glimpse something of the phonetic character of Basque as it was about 2000 years ago.

THE EARLIEST EVIDENCE OF THE BASQUES AND THEIR LANGUAGE.

The earliest evidence of anything that reflected the existence of the Basque language are references to place-names and tribal names made by the Greek and Roman classical authors and cartographers. Names of peoples like the² Vascones and the³ Ausci (which is thought to contain the root eusk-) and place-names like⁴ Oiasso and⁵ Bituris, (which is identified with the present-day town of Bidaureta) testify to the presence of a linguistic stratum not very different from the present-day Basque dialects. Further evidence is supplied by a series of Roman epigraphic inscriptions mostly found in areas near the northern slopes of the central Pyrenees, from the town of Tardets in Soule in the west eastwards to Saint Girons in Gascon Ariege, far away from the present-day limits of the Basque region which shows that the Basque language was once spoken almost along the full length of the Pyrenean chain. These inscriptions bear personal names and names of local deities like Aherbelste, Astoilun and Baeserte which resemble modern-day Basque words like Aherbeltz. Most important, however, is a series of words like Andere, Nescato and Cison which are almost identical to modern-day Basque andre, neskato and gizon showing a very slow phonetic evolution in the last 2,000 years.

For the next evidence of Basque, we have to wait until the 10th century when names of people appear in documents and chronicles. For instance, Aita - father, appears in a document of 980, and ozzua (otsoa) - the wolf, appears in 981. Also, in the 10th century, although Basque was not normal at the monastery of San Millán de la Cogolla, the insertion of a couple of Basque glosses in the manuscripts entitled the Glosas Emilianenses - the oldest document in Castilian Spanish, hints that the language was understood by some of the monks. There are 2 verbs mentioned here guez/(c)ajutu ezdugu and izioqui dugu and both show that the nature of the Basque verbal

system was then substantially what it is now but Basque before the 10th century is still a matter for conjecture.

In the 11th century, we have isolated words again like ataburu - lintel, threshold from the year 1007, eskerra - the left hand or the left-handed one in 1024, and seitegi - place of vultures in 1030. We also have some personal names like Eneko Beltza in 1072 and Sancho Begiederra in 1080 but this is 1080 but this is all we have in the 11th century.

However, in the 12th century, a Norman pilgrim, Aimeric Picaud, passed through the Basque Country in 1140 on the pilgrim route to Santiago de Compostela and gave one of the first surviving personal accounts of the Basques in the pilgrim guide-book, the Codex Calixtinus Compostellanus. This provides us with the first known vocabulary of the Basque language consisting of a list of 18 common words and their meanings of which the following are examples - aragui - meat, araign - fish, echea - the house, andrea - the woman and Urcia - God. With the exception of the word - Urcia (which has been replaced in modern Basque by Jaungoikoa) all the words given in the list are in current use today having undergone very few phonetic changes.

For the next evidence of Basque, we have to wait until 3 centuries later when in the 15th century, another pilgrim to the shrine of Santiago de Compostela, this time the German knight, Arnold von Harff, gave us a similar list of Basque words for the period 1496-1499. Again we see very few phonetic changes in the words i.e. aragi - meat, ogea - bread, gasta - cheese, gaza - salt and Schambat? (modern Basque - Zenbat?) - How much? These words are almost identical with modern Basque words.

55

Finally, the oldest Basque texts - brief but continuous, date from the beginning of the 16th century. A short Basque vocabulary was included in a long work by the Sicilian humanist, Lucius Marinaeus Siculus in 1533 and this constitutes the first known example of printed Basque.⁶ Next came the first consecutive Basque text to appear in print and this was Perucho's song in the third part of La Celestina by Gaspar Gómez in 1536.⁷ This, in turn, was closely followed by a short Basque passage in François Rabelais's Pantagruel in 1542.⁸

This then gives some indication as to what we have as regards early linguistic evidence of the Basque language - isolated words scattered here and there in a few medieval manuscripts and short lists of vocabulary in which the spelling of the words cannot be deemed as accurate. Even if there have been only a few phonetic developments in the past 2,000 years, they are imperfectly known due to the dearth of medieval Basque texts. In addition to this, it must be said that classical authorities like Strabo, Pliny and Ptolemy cannot always be trusted because they are considered as being notoriously lax in their rendering of non-Greek and non-Latin names.

THEORIES ABOUT THE ORIGINS OF THE BASQUES.

In spite of the paucity of linguistic material concerning the Basque language, there have been many attempts to explain the origins of the Basques and their language over the past 400 years. This has been the subject of much discussion by eminent historians, linguisticians, Basque clergymen and amateurs alike. In fact, it could be said that the Basques and their language constitute the major mystery of Europe today, but before attempting to shed some new light on this difficult issue, a brief description of the various phases and directions of thought is necessary.

Preoccupation with the origins of the Basque language had been a theme since the 16th and 17th centuries when it was assumed that Basque had to be linked with the early inhabitants of the Iberian Peninsula and was the first language to be spoken in Spain. The first ideas on Basque origins were based either on Ancient Greek myths like the destruction of Atlantis or on biblical literature and the theories on creation involving the legend of the flood. This legend gave rise to a theory called Tubalism in the first half of the 18th century⁹ which stated that the Basques were the descendants of the biblical patriarch, Tubal, grandson of Noah, a belief which persisted right up until the late 19th century.¹⁰ The 18th century writers who were mostly Basque clergymen, were dominated by the pious regional mysticism of the times which taught that in Basque could be recognized the mother tongue of all languages. Indeed, in 1745, a Basque Jesuit priest, Manuel de Larramendi, wrote a dictionary in which he derived a large part of Spanish vocabulary, Latin and other Romance words from Basque roots.¹¹ This was a practice continued into the early 19th century by others like Astarloa¹² and Erro.¹³

THE IBERIAN THEORY.

Larramendi did, however, link the Iberians and their language to Basque¹⁴ and this theory that the Basques and the Iberians were connected to each other was to dominate Basque studies throughout the 19th century and the first half of the 20th century. Astarloa worked on this at the beginning of the 19th century¹⁵ and was followed closely in this by the German scholar, Wilhelm von Humboldt in works published in 1817¹⁶ and 1821.¹⁷ Humboldt believed that he could acquire a greater understanding of the ancient Iberians and their language by investigating Basque and comparing the ancient place-names of Spain with Basque words and roots. The belief that Basque

was the only survivor of the Iberian language or languages prompted scholars like Emil Hübnér,¹⁸ Hugo Schuchardt¹⁹ and Manuel Gómez Moreno²⁰ to examine the Iberian texts, decipher the Iberian alphabet and try to read the inscriptions by means of Basque. As regards Iberian, there are only a limited number of words available i.e. only about 1,000 items form the preserved thesaurus of Iberian of which only a few can be compared with Basque forms. One case is the comparison popular since Humboldt²¹ of Iberian town-names formed with Iri, Ili- or Ild- as in names like Iliberris near Granada and Ilerda or Iltirida (Lerida today).²² This element Ili- resembles modern Basque - iri, uri - town but it could be explained as a borrowing through contact due to a long period of co-existence i.e. of almost 2,000 years between Basque speaking pastoral people in the Pyrenean mountains and Iberian urban dwelling people living further down on the plains where they practised agriculture.

Today, we can say that Basque cannot be identified with Iberian and that in spite of the strenuous efforts by some scholars, the Iberian texts cannot be interpreted by the application of Basque.

The Iberian theory was extended to North Africa and led some scholars at the turn of the century to propose a possible relationship between Basque and the Hamitic languages.²³ The Iberians or peoples before them could have been importers of African elements into the Iberian Peninsula and consequently into the Basque language. Scholars like Schuchardt²⁴ and Leo Reinisch believed that the Iberians were the intermediary link between the Basques and the Berbers of North Africa. However, in spite of a few similarities between some Basque words and North African words, there is very little to suggest any genetic relationship between Basque and the Berber languages. Today, with the exception of a few scholars like Antonio

Tovar,²⁵ the Hamitic connection, although interesting, is no longer accepted by the majority of experts.

THE CAUCASIAN THEORY.

Today, the search for languages related to Basque has gone far afield. Numerous coincidences in grammar and vocabulary between Basque and the little known and much varied languages of the Caucasus mountains of southern Russia have captured the attention of many linguisticians.

The possibility of a relationship between Basque and the Caucasian languages had first been considered in the early 19th century by Humboldt²⁶ and later by Antoine d'Abbadie²⁷ in 1836. In 1879, el Padre Fita²⁸ indicated some similarities between Georgian and Basque. However, the grammatical approach to these considerations really began with a work by Schuchardt in 1896²⁹ when he was induced by the passive character of the transitive conjugation in Basque verbs to study the Caucasian languages where he noted a similar phenomenon in the verbs there. Indeed, the apparent passivity of the verb involving the ergative construction and other morphological tendencies like the incorporation of pronominal elements into the verb formed the basis of the Caucasian theory. In the 20th century, men like Uhlenbeck³⁰ Trombetti,³¹ Dumézil,³² Lafon³³ and Bouda³⁴ tried to reinforce this theory but the results of their work are not convincing. Their methods consisted of drawing up long lists of words in both Basque and Caucasian and concluding that there must be a relationship because many words look alike but this is not enough to demonstrate a genetic connection between the languages.

The Caucasian theory involved basically a migration of people westwards from the Caucasus mountains to the Pyrenees who then grafted their language or something of the Basque language onto the native inhabitants of the region.

The prehistorian, O. Menghin in 1948³⁵ tried to devise a theory to explain the arrival of Caucasian elements to the west in the third millennium B.C. in the Neolithic Age but there is no archaeological basis to this theory. There is, however, the alternative theory involving a vast language family submerged by the arrival of the Indo-Europeans. This theory would make the Basque language in the west and the Caucasian languages in the east the last surviving remnants of this language group but again there is little evidence of this. Moreover, we know very little about the prehistory of the Caucasus and we are not sure if all the languages there are related to each other in any case. The Caucasian theory has been criticized and dismissed by scholars like Luis Michelena³⁶ and today, it is not the most favoured theory as regards the origins of the Basques and their language. Any theory about a migration of the ancestors of the Basques to the Basque region has not stood the test of time for today, on the contrary, it appears that we can assert their occupation of the present-day Basque region from remotest antiquity.

If in the last 2 centuries or more, amateurs and scholars alike, guided partly by imagination and partly by some serious linguistic investigations, could believe that the Basques and their language had come from some unknown source, this has been countered by recent evidence of a different nature.

THE LOCAL OR "INDIGENISTA" THEORY.

Where history and linguistics alone afford us little information on the Basques due to lack of material, archaeology and anthropology have been more helpful. Here, one did not fully realize the possibilities until the French geologist and prehistorian, Edouard Lartet, began a series of investigations in the Périgord region of the Dordogne area in south-west France in 1863. This area contains an exceptionally large number of important Palaeolithic sites. The greatest concentration lies in the valley of the Vézère river

near the village of Les Eyzies and in 1868, Edouard Lartet unearthed some human bones in a rock shelter at the village of Cro-Magnon near Les Eyzies.

This famous Cro-Magnon man, who lived there some 30,000 years ago was distinguished by his height, his long, narrow skull, quadrangular eye sockets, high cheek-bones and prominent nose and these features strongly resemble those of the present-day inhabitants of the western Pyrenees.

The Cro-Magnon theory of the origins of the Basques as a race of people was first proposed by Telesforo de Aranzadi³⁷ and Bosch Gimpera.³⁸ This Cro-Magnon discovery, however, was interesting enough in itself but it required more recent archaeological work and results to relate it directly to the Basque region. This additional evidence was uncovered during a series of excavations done by 3 Basque prehistorians, Barandiarán, Aranzadi and Eguren from 1928 to 1936. These excavations took place in the cave of Urtiaga, near the town of Deva in Guipúzcoa. Here, 6 human skulls were uncovered at various levels in the cave. According to this discovery, the oldest skull would date back to just after the Magdalenian era - the last great phase of the Upper Palaeolithic. This places it at around 10,000 or 9,000 B.C. This skull was of a transitional type, between that of Cro-Magnon man and the present-day Basque type and Barandiarán suggests that at around 7,000 B.C., the ancestors of the Basque race emerged while the other 5 skulls from the succeeding levels above only accentuate this evolution towards the modern Basque type - an evolution completed at around the beginning of the Neolithic era in the region i.e. near 4,000 B.C. To substantiate this theory further, other skulls were unearthed later at Itziar in Guipúzcoa and this evolution can also be traced

right down to the Neolithic by the skull of a child found at the cave of Santimamiñe in Vizcaya and by skulls uncovered from the dolmens of Aralar, Aizkorri and Urbasa elsewhere in the Basque Country.

These findings suggest that the mass of the Basque population has remained static since the Upper Palaeolithic and the succeeding Mesolithic times and this conclusion has given rise to the theory which tends to prevail today, known in Spanish as the Indigenista theory. This has prompted the Basque archaeologist and prehistorian, José Miguel de Barandiarán to conclude that today's Basques are the result of the local evolution of Cro-Magnon³⁹ man but what about the Basque language? Barandiarán believes that the Basque people are older than their language for he does not rule out the possibility of an ancient Basque-Caucasian language family and Basque having been brought into the area by immigrants at some time or other.⁴⁰

The whole problem as regards the question of the Basque language could be stated as follows. Cro-Magnon man's lasting achievement was his Cave Art which had a uniformity of style over a wide area stretching from Arturias and Cantabria in the west to the western and central Pyrenees and on into south-west France, particularly up to the Dordogne region. This general stylistic uniformity suggests to the archaeologists and anthropologists alike that there could have been something approaching a cultural, religious and possibly a linguistic uniformity over this area as well.⁴¹ Moreover, the findings from the distribution of human blood groups in the region suggest that the population in southwest France and the western and central Pyrenees seems to have been homogeneous, implying the existence of a very old ethnic stratum.

Having mentioned these possibilities, it must be said that it is generally accepted nowadays that in spite of the climatic change to warmer

conditions which marked the end of the Magdalenian era (and with it the Upper Palaeolithic Age in general) and the beginning of the succeeding Mesolithic (Azilian) Age at around 9,000 B.C., there was no change in the make-up of the local population which any fresh wave of people into the region might have brought about. This is believed because no interruption in the settlements in western Europe can be seen and if we assume that the local Magdalenian population and their immediate descendants lingered on in south-west Europe, then their language or languages could also have persisted into the subsequent Mesolithic era. Hence, if the present-day Basque physical type can be traced back to Cro-Magnon man and if there is little evidence of any later foreign intrusions into the western and central Pyrenees, could perhaps something of the Basque language reach back also to the Upper Palaeolithic or, at least, to the later Mesolithic Age?

In an effort to find out if this is possible, it is necessary in the following chapters to search for certain words or roots embedded in the lower strata of the language and also to examine words which have already been singled out by various scholars as possible candidates for reflecting the world of the last Ice Age or of the succeeding Mesolithic period.

We must look too at the numerous cultural influences which affected the region, influences which could or could not have been responsible for introducing words designating new concepts into the language during late Mesolithic or early Neolithic times.

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2. (a) Livy, Ab Urbe Condita Libri, Book 91, Chap. 3, p. 58 ad Calagurrim Nassicam sociorum urbem venit per Vasconum agnum ducto exercitu in confinio Beronum posuit castra in 'Las referencias sobre los vascones hasta el año 810 después de J.C.' by Adolf Schulten.

In Revista Internacional de Estudios Vascos, Volume XVIII, (Paris - San Sebastián, 1927), pp. 226-227. (Hereafter abbreviated as R.I.E.V.),

(b) Varro-Pliny (the Elder), Naturalis Historia, 77-79 A.D., Book 3, Chap. 22, p. 89 post eos (Indigetes) quo dicetur ordine intus recedentes radice Pyrenaei Ausetani, Fitani, Lacetani, perque Pyrenaeum Ceretani dein Vascones. (cf. Adolf Schulten, 'Las referencias ', p. 228).

(c) Strabo, Geographiká, (circa. 10 B.C.), Book 4, Chap. 3, pp. 155, 161, Ouaskonon. (cf. Adolf Schulten, 'Las referencias ', p. 228).

(d) Ptolemy, Geographiká, (150 A.D.), Book 2, Chap. 6, p. 10, Ouaskonon. (cf. Adolf Schulten, 'Las referencias ', p. 232).
3. (a) Strabo, Geographiká, Book 4, Chap. 2, pp. 1, 2, Auscioi. In La Enciclopedia General Ilustrada del País Vasco, Vol. I, (San Sebastián, 1970), p.142.

(b) Pliny (the Elder), Naturalis Historia, (77-79 A.D.), Book 4, Chap. 18, p. 107, Ausci. (cf. La Enciclopedia p. 142).

(c) Pomponius Mela, De Situ Orbis, (37-41 A.D.), Book 3, Chap. 2, p. 94, Ausci. (cf. La Enciclopedia p. 143).

(d) Ptolemy, Geographiká, Book 2, Chap. 7, p. 44, Auscioi. (cf. La Enciclopedia p. 145).
4. (a) Pliny (the Elder), Naturalis Historia, Book 3, Chap. 3, p. 29; Book 4, Chap. 4, p. 110, Olarso. (cf. Adolf Schulten, 'Las referencias ', p. 232).

(b) Strabo, Geographiká, Book 4, Chap. 3, p. 161, Oidasouna. (cf. Adolf Schulten, 'Las referencias ', p. 232).
5. Ptolemy, Geographiká, Book 2, Chap. 6, p. 66, Bituris. (cf. Adolf Schulten, 'Las referencias ', p. 230).
6. Lucius Marinaeus Siculus, De rebus Hispaniae memorabilibus, Libri XXV in the Latin version, f XXIX, (Salamanca, 1533), (See J. de Urquijo, '¿Cuál es el primer texto vasco impreso conocido? - Observaciones sobre los pasajes en vascuence de Marineo Sículo y otros autores del siglo XVI', in R.I.E.V., Vol. IV, (1910), pp. 573-586.

7. La canción de Perucho in La tercera parte de la tragicomedia de Celestina,
by Gaspar Gómez, (Toledo, 1536). (cf. J. de Urquijo -
'La tercera Celestina y el canto de Lelo', R.I.E.V., Vol. IV,
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8. François Rabelais, Pantagruel, Chapter IX of the 2nd Book of Pantagruel,
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9. El capitán Don Juan de Perochequy, Origen y antigüedad de la lengua
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creación, (Barcelona, 1731).
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ses traditions, ses caractères anthropologiques, (Pau:
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12. Pedro Pablo de Astarloa y Aguirre, Apología de la lengua bascongada
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- and Mundo primitivo o examen filosófico de la antigüedad y
cultura de la nación vascongada, (Madrid, 1815).
14. Manuel de Larramendi, Diccionario, p. 107 in the preface.
15. P. P. de Astarloa y Aguirre, Apología, pp. 58-75.
16. Wilhelm von Humboldt, Berichtigungen und Zusaetze zum Mithridates
über die cantabrische oder baskische Sprache, (Berlin, 1817).
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Chapter 1.

The Palaeolithic Age.

The purpose of this chapter is to try to determine whether or not one can really speak of an ancient Palaeolithic stratum of words in the Basque language today.

Some scholars like¹ P. Bosch Gimpera and even² Barandiarán argue that the Basque language could go back no further than the pastoral Pyrenean Culture of the Neolithic i.e. from 5300-2000 B.C., but the discovery of Cro-Magnon man and the six skulls in the cave of Urtiaga could challenge this view.

It was the eminent Spanish historian and philologist Menéndez Pidal, who, in 1921, saw in the Basque language a possible relic from a bygone age, older than the present climate and geological period in western Europe³. However, before looking for any traces of the Paleolithic world in the Basque language, it is necessary first of all to describe this Paleolithic world briefly and to indicate the immense time-scale involved.

The Palaeolithic Age is the oldest archaeological period in Europe and is divided into the Lower, Middle and Upper Palaeolithic Ages. It is associated with the Pleistocene Ice Age. This covers an enormous period of time from roughly 600,000 years B.C. right down to about 10,000 B.C. when the ice sheets in Europe finally retreated northwards. It is the last stage of the Palaeolithic, the Upper Palaeolithic, which concerns us most of all. This stage started perhaps as early as 38,000 B.C. in Europe with the appearance of Homo Sapiens Sapiens, Blade-and-Burin industries and the famous Cave Art of Western Europe and lasted down to around 10,000 B.C. This was the era of Cro-Magnon man in south-west Europe. This Upper Palaeolithic period can, in turn, be sub-divided into

various cultural levels - the Chatelperronian (pre-35,000 B.C.), the Aurignacian (35,000 - 28,000 B.C.), the Gravettian (27,000 - 18,000 B.C.) the Solutrean (19,000 - 14,000 B.C.) and finally and most important, the Magdalenian era (14,000 - 10,000 B.C.) because this last period represents the golden age of Cave Art in Western Europe and is the likeliest period to which some elements in Basque could be assigned. Moreover, it is possible that the Cave Art and the dates associated with it tell us something about the original geographical distribution and beliefs of the ancestors of the Basques and with this, perhaps something about their language also. This Cave Art however, goes right back to the Gravettian of 25,000 B.C. in the Dordogne in some instances and at the Abri Pataud site near Les Eyzies in the Dordogne, there are cave artifacts with representational art with radio-carbon dates of pre-30,000 B.C. and pre-31,000 B.C. and at the Grotte du Renne (Arcy-sur-Cure) there are dates closer to 35,000 B.C.

When one appreciates the time-scale involved here, one must be cautious as regards searching for ancient vocabulary because Basque as it was only about 4,000 years ago would have been radically different from what it is today and here we are talking about 10,000 - 14,000 B.C. as regards the Magdalenian era. One cannot even attempt to reconstruct words as they were then and the purpose of this chapter is not to invent fanciful proto-forms where there are no historical or linguistic records of Basque before 2,000 years ago. Even if Basque or the ancestral language of Basque were, indeed, the speech of the Cro-Magnon people this proto-Basque language would be almost totally unrecognizable in form from what it was in the 16th century when Basque literature officially got underway.

Recent scholars like Isaac López Mendizabal have attempted to reconstruct Upper Palaeolithic's man's vocabulary by simply selecting at random words in Basque designating cold-climate fauna and flora and leaving it at that.⁴ However, if we try to describe the Ice Age environment of the Cro-Magnon people, then we could try to see whether there is any echo of this in the composition of some Basque words and in the similarities between certain words and others.

The region under discussion here is not that of the present-day Basque Country alone but of the regions linked together by the distribution of Cave Art i.e. from Cantabria in the west, through the western and central Pyrenees and on up to the Dordogne region of south-western and south-central France.

During the last Ice Age in Europe the kind of vegetation which predominated was of a tundra or steppe vegetation and climate, characterized by an arctic temperature with the ice sheets covering Scandinavia, Northern Europe and most of Great Britain and Ireland. The final stages of the Upper Palaeolithic involving the Solutrean and Magdalenian periods coincided with the end of the Würm glaciation. Although the Upper Palaeolithic fell within a long glacial period, the climate during this phase was far from uniform either in temperature or in humidity. There were in fact 4 glacial maxima in the Würm, the 3rd and 4th of which corresponded with the Upper Palaeolithic and were also the most severe; they were not however of long duration and climatic amelioration produced long warmer interstadial periods in between. These climatic changes promoted shifts in the habitat of flora and fauna. The proximity of ice sheets in Würm 3, for example, turned Belgium and the Paris basin into a polar desert where neither animals nor men could live, while interestingly, the topography of south-west France ensured that this

region was at no time uninhabitable. In fact, an arctic type of tundra probably never existed in south-west France, the latitude being so southerly as to preclude it. During the Ice Age, it is important to realize that there were many changes in the vegetation, for instance in the very cold and dry phases of Wurm 3 and 4, there were probably large areas of open grass steppe in south-west France. The idea that that part of Europe relatively free of the ice sheets was always a vast sub-arctic tundra of sparse, primitive vegetation consisting of nothing more than lichens, stubble and mosses is a careless generalization and this is important when discussing the Basque language. As regards the fauna, evidence from food remains of Upper Palaeolithic sites and indeed from the prehistoric cave paintings themselves show a variety of animals. The species represented cover a wide range of climate and habitat from temperate frost to extreme cold. They tell us that reindeer, woolly mammoth and woolly rhinoceros inhabited the open steppe in the coldest phases with horse, bison, oxen, deer, bear, felines, aurochs, goats and ibex in the more temperate periods and in the warmer interstadials, reindeer and mammoth were replaced by forest species such as red deer and wild pig.

Whether the climate was extreme or mild, there seems to have been an abundance of game available. Upper Palaeolithic man was both a hunter and a gatherer and his food supply was varied i.e. meat, nuts, fruits, berries and the vines of the Dordogne region, the Pyrenees and Cantabria were rich in salmon and, indeed, his settlements are so often clustered along the river systems.

What about the people who lived in this world? In so far as it is possible to reconstruct a period so remote as that of the millennia between 35,000 and 10,000 years ago, we can only conjecture that Europe was inhabited by small, nomadic or semi-nomadic bands using tools and weapons of flint,

bone, antler and wood and they knew the use of fire. A factor which was very important for the continuous and stable presence of man was the availability of wood for burning, building and making tools for even in the coldest periods, the south-west of France was not treeless. The Upper Palaeolithic people had animal furs for clothing and they constructed tent-like structures for shelter as evidenced by the Gravettian open-air site at Corbiac which shows a couple of possible tent-like foundations. This population lived north of the mountains, living on the steppes for part of the year round and seeking refuge in caves or under the jutting overhangs of limestone cliffs during the winter months.

As regards what kind of language these people spoke and the degree of interaction and similarity between each community it is as well to remember that we have to visualize this territory not with the present configuration, but with a larger low coast extending north of the present sea coast forming a territory of as much as perhaps 10,000 square miles. Even the land which today seems to be too high above the sea level was lower at that time. The whole point is that during much of the last Würm glaciation, the area from the Dordogne to Cantabria formed more of a geographical unity or continuum and allowed much greater freedom of overland movement and communication than it does today. This ensured that the north-east coast of Spain was never isolated from the south-west coast of France. This continuity of territory seems to have produced a continuity of culture seen from the general stylistic uniformity in the Cave Art. This would suggest a certain religious uniformity and with it possibly some original linguistic uniformity as well which might have splintered up through time.

The homogeneity of Upper Palaeolithic art over a wide area and its very durability both tend to suggest that there were no great social upheavals in this part of south-west Europe and so there is a likelihood

of there having been no great linguistic disturbances in this area. If each of the communities had lived in isolation, this would have produced some marked regional variation, both in artistic styles and in the religious background which inspired them and we do not see this happening.

Of course, we do not know if these societies to the north of the mountains had one unified language or languages of the same family or even entirely different languages but by selecting certain words from the Basque language and examining the mentality behind their formation and their resemblances to other words in the language, we would find out whether something at least of the Ice Age world of Cro-Magnon man is reflected in the Basque language of today.

THE CASE FOR ANY REMNANT OF UPPER PALAEOLITHIC VOCABULARY - ELUR.

We could start looking for possible candidates for Ice Age vocabulary by examining words concerning the natural environment of the time. For instance, 2 almost identical words, - lur and elur stand for earth and snow respectively and it is known that between 30,000 and 20,000 B.C. the perpetual snow-line, previously 1,100 metres above sea-level, rose to 3,000 metres in the region. Hence, could the similarity between these 2 words go back to that age when there was almost always snow on the ground to such an extent that the earth, soil or ground gradually became identified with snow? However, the etymological identification of elur with lur could be an error for elur could be closer to the Basque word for water - (h)ur. Elur tends to dissimilate in form from lur when it occurs in other Basque dialectal variations i.e. it can appear variously as - elhur, erur, edur and even - eur⁵ which could also link it to the word for rain - euri. However, supposing that - elur is, in fact, related to - lur -wherein lies the explanation for this similarity not found elsewhere in other languages

of Europe except in the Eskimo languages of North ~~Siberia~~^{AMERICA} and ~~Siberia~~^{Siberia} - which are spoken in areas where there is almost perpetual snow on the ground? The answer could be found not in the low-lying areas of southwest France which might never have been covered with snow for any length of time during the year in the Ice Age since it would have been too far south but rather in areas where the language could have been spoken and where there was something like all year round snow i.e. where the altitude was and still is very high i.e. in the western and central Pyrenees. Here, the cold-climate flora would have remained after the change to warmer conditions at around 9000 or 8000 B.C. Hence, the identification of earth with snow might have taken place in the language long after the Upper Palaeolithic Age came to an end around 10,000 B.C. because the mountains have always constituted the nucleus of the Basques and perhaps the similarity between these 2 words could go back to only as recently as the pastoral Pyrenean Culture of 5300 - 2000 B.C. during the Neolithic Age.

The time-scale involved is so vast here that one cannot automatically assign words to the Upper Palaeolithic but all one can do is look at the reasoning behind some of the words.

(H)ORMA.

There is also the word (h)orma meaning both an interior wall and a thin ice which forms on roads and it could be said that this could go back again to the Ice Age when the walls of the caves were mostly covered in ice or icicles. However, this is much too fanciful but recently, there has been some linguistic speculation about the origins of this word and there could be 2 separate words involved here - (h)orma meaning ice could, indeed, constitute an ancient and integral Basque word while (h)orma or borma in earlier texts as applied to walls seems to derive from Latin - forma⁶ with initial Latin -f- changing to initial h- just as it does in Castilian

Spanish. However, all this still does not prove the antiquity of the word - (h)orma - meaning ice because all languages in Europe have words for ice and icicles and this does not mean that, for instance, the Indo-European languages have been spoken in Europe since the last Pleistocene Ice Age. Hence, here again, the assumptions of Barandiarán⁷ do not seem convincing.

URRA and INTZAURRA.

Basandiaran has also attached some importance to the similarity between the words - urra - hazel-nut and intzaurra - walnut. According to him, if the hazel-nut existed since the Mousterian end i.e. the Middle Palaeolithic Age, the walnut must have appeared later as evidenced by the words which seem to suggest that intxaurra derives from urra.⁸ Admittedly, the second element in the word intxaurra does appear to be -urra but intxaurra appears in many different forms in the various dialects and one can never be quite certain which is the true form of the word. It appears as etzagur, itzagur, in Roncales, as giltzagur in the Salazar dialect, as etxabur in Aezcoan and as intzagor in Souletin⁹. Place-names and ancient texts give us -ynsaur. The second element -(h)ur need not be hazel-nut but the word for water (h)ur and it could provide a link between - nut/kernel and water, dew or moisture due perhaps to both being central to the survival of life. However, as to when one word was derived from the other, one could suggest tentatively that this could refer more to the succeeding Mesolithic Age of 9,000 to 4,000 B.C. when walnuts and especially hazel-nuts would have provided the staple diet for many forest-hunting and gathering communities.

WORDS FOR BRACKEN AND FERN.

The commonest plant among Basque flora, according to its frequency in Basque vocabulary, is the word or words for bracken or fern which are variously -aro, ara, -ere, ira, garo, oro, uda, or -uru - so integral are

they that the variation uda- occurs in the present-day names of the seasons of the year which are thought to have been created during the Neolithic Age since they seem to reflect the annual cycle of an agricultural people i.e. udaberria -spring, could really mean - the new bracken or fern and udazkena -autumn or literally the last bracken or fern.¹⁰ Admittedly, the word -uda in this context is usually translated as meaning summer but it could be ultimately related to the idea of bracken or fern. Hence, the occurrence of bracken or fern could have been very central in formulating the seasonal divisions of the year. However, what is so significant here is that bracken or fern are cold-climate vegetation and one could easily conclude that this is reminiscent of the last Ice Age. Yet, although it is tempting to link this to the last Pleistocene, we must remember again that the Basques have been a predominantly hill or mountain-dwelling people at least since the beginning of the pastoral economy in the Pyrenees around 5300 B.C. as opposed to spending most of their existence down on the plains to the north. Fern and bracken do occur frequently up in the mountains all the year round where the vegetation is sparse due to the altitude being higher - so here, we must not be misled for the formation of the above words for 3 of the seasons could really be quite recent i.e. during the Neolithic or even later when agriculture became even more developed i.e. during the Bronze Age or Iron Age.

However, there is a method of deducing whether there could be any Palaeolithic stratum of vocabulary in Basque. If we look at place-names, we sometimes see that the words used in their composition do not seem to reflect present-day reality i.e. the biggest forest in the Basque Country today, the forest of Irati in Navarra, has a name which today would appear to signify an expanse of bracken or fern (i.e. helechal in Spanish).¹¹ It would appear to contain the word ira - bracken and the collective suffix -ti, suggesting that the area covered in trees today was covered in fern long ago but of all words in any language, place-names can be

the most deceptive. They tend to undergo phonetic change more than other words and Irati today could be a contraction of something else, so we must be cautious here.

IZOTZ.

The word for frost or hoarfrost in Basque - izotz seems to be composed of 2 words - itz - stagnant water which seems to be connected to ihi(n)tz -dew and (h)otz - cold. Michelena himself agrees that this would not be phonetically impossible and it does seem to be an opinion which has been repeated for quite a while.¹² This brings into question the origins of the composition of words in Basque and they can be quite misleading for Larramendi himself in the early 18th century coined many new composite words like -ugarte -island - which means literally - between water(s) and many new composite words came into existence largely due to the efforts of Sabino Arana at the end of the 19th century to rid the Basque language of all -erderismos or foreign words and elements.

However, as regards izotz, if the etymology above has some semblance of truth to it, then how far back could it go and what does it tell us about the people who described hoar frost in such a way? If this did take place in the Pyrenees, in a closed mountain-dwelling series of communities where the culture would have been very local indeed, there is really no way of telling. The formation of this word could go right back to when the Pyrenees were first colonized by an incipient reindeer hunting people coming from the more climatically favourable plains near the Dordogne during the Magdalenian era of 14,000 to 10,000 B.C. when they first became accustomed to living in a cold, high-altitude environment. This is a possibility for the mountains were not inhabited as much during the subsequent Mesolithic era. The other possibilities include the still later Neolithic era when the pastoral Pyrenean Culture got underway and the ancestors of the Basques had to use the mountains as their primary area for

most of the year round, or, the invention of this word could even be relatively recent i.e. during the Iron Age or the Dark Ages.

(H)UR-UGATZ̃.

In very localized cultures, basic, natural concepts like river, stream or hill etc. can be designated by words formed from very basic roots i.e. the word (h)ur -when it occurs as an initial element in a composite word, becomes u(h) - or u(g) i.e. in the Roncal dialect, the word for river is -ugat̃ and in Souletin it is -uhátx and this could derive from -(h)urgaitz meaning-big water according to Michelena.¹³ Indeed, in some Basque dialects, like High Navarrese, Guipuzcoan and Labourdin, -gaitz is a suffix meaning enormous or huge and in Vizcayan, it occurs as -gats̃ and can be used as an excessive or superlative suffix as in -andigats̃ - too big. According to Azkue, -gaitz and -gats̃ are the same¹⁴ yet how old is this word? Again, it could be only a recent phenomenon in the language but what kind of a language would call a river simply "big water"? Admittedly, this is only done in 1 or 2 dialects and one cannot immediately attribute the formation of this word to the Upper Palaeolithic or to any other -lithic age for that matter but the mentality behind the formation of such a word could suggest a Stone Age invention. There is no way of knowing when it could have been formed for many languages go through some phases during which words begin to be composed like this - phases that occur even today as in German with words like Wasserstoff - or literally water stuff or substance meaning hydrogen, a trend which began at the end of the 19th century although the analogy here may not be very accurate. Perhaps the practice of forming words like -ugat̃ and uhátx could reflect a brief trend or episode in some dialects of Basque as recently as the 14th or 15th centuries.

WORDS FOR TREES.

It is as well at this point to mention one of the most important and frequently noticed features of Basque floral vocabulary. It is that the

names of many trees and other green-forest vegetation in Basque today seem to be derived from the many words for lichens, bramble, stubble, bracken and mosses - the region's principal vegetation during the Ice Age. Men like López Mendizabal concluded from this that when the climate began to get warmer and more humid at the end of the Upper Palaeolithic Age (circa 10,000 B.C.), the cold-climate flora gave way to a wetter, forest vegetation down on the plains and in the lower valleys, not unlike the present-day vegetation of the region although much more dense. This heralded the onset of the Mesolithic era and in the absence of archaeological evidence of any new migrations of people into the region from Cantabria up to the Dordogne, it would appear that the descendants of the local Magdalenian population just lingered on in the region comparatively undisturbed. However, it is just possible that with the passage of time and the gradual change in vegetation, these ancestors of the Basques began to use the words which they had applied previously to the smaller and colder Ice Age flora as bases upon which they could now form new words to designate the ever-increasing forest vegetation in the area.¹⁵

However, López Mendizabal simply made up a long list of words for trees and provided roots for them - roots which, on closer inspection are not satisfactory. He quoted the relevant form of the roots but paid very little attention to all the dialectal variations of them - variations which dissimilate in form.¹⁶ Moreover, it must be said again that here, all we can use as evidence are the present-day forms of these roots and the words which are said to derive from them or, at least, roots from as late as the 16th century. However, at this stage, what concerns us here are the supposed roots rather than their derivatives.

He derived the words for lime tree - astigar and blackberry tree - astilar from the root asi, sasi - bramble¹⁷ but today, the word sasi is thought to derive from a form -zarzi which occurs in a famous work by

Oihenart of 1638 in the context - "garçi vel sassi."¹⁸ This would derive it from Spanish - zarza. If so, then this root can only be a recent occurrence in Basque. López Mendizabal also derived the word - baso, basa - wood, forest in Basque from aso, asa - variants of sasi¹⁹ something which is open to doubt, and besides there are other Basque words for bramble - i.e. arra and erro.

He derived the word arte - a holm-oak from arr, larr - thistle or thorn²⁰ but this root dissimilates in form in some dialects i.e. in Upper and Lower Navarrese, Guipuzcoan, Labourdin and Vizcayan, it is - lahar. In some dialects, initial l- alternates with initial n - i.e. lahar becomes nahar in the Souletin dialect and nar in the Roncal and Salazar dialects.²¹ The form ar can become -agar in the dialect called -Meridional which refers to the present-day province of Álava in Spain and in other places, it can become erro. He also derived sagar - apple from both - aga and agan - millet and again this is not convincing.²² Again all we have are the relatively recent forms. The form -eski, ezki for a maple-tree could perhaps come from aski - thick grass²³ but when we have other forms for maple-tree like askar, eskar which are more likely to remind us of ezkur - acorn or (h)azkor - growing (adj.) tending to grow (cf the verb (h)azi - to grow in size), this does not look to be the case.

However, as the origin of any word involves the study of its dialectal forms, it must be said that at times it is better to cast a suspicious eye even on these forms because dialectal variations can be misleading when searching for the original form of a word. Dialectal forms can involve sheer slang, laziness, slurring or mispronunciation of words and even certain foreign influences as in Souletin and consequently one can never be sure of the original proto-form of any word.

Nevertheless, López Mendizabal did make some interesting connections for he did provide a native Basque etymology for the word (b)urki - a birch tree.²⁴ A Germanic origin had lately been given for this word²⁵ but he gave 2 native Basque alternatives, namely urr - hazelnut and uru one of the many variants of the word for bracken or fern. He also suggested an interesting connection between elor - a hawthorn tree, elar - heather and elar, belar - grass.²⁶ Yet, here again, we must be cautious of the many different forms these words have in different dialects. Elar - heather can become elhar in Lower Navanese and Labourdin and elsewhere i.e. in Souletin - ilharre and it can dissimilate further - gillar, txillar (Guipuzcoan), iñarra, giñarra, gindarra, kiñar²⁷ these last 4 forms being Vizcayan. Belar - grass can occur as belhar (Leizarraque - 1571) and berar and bedar²⁸ yet the concepts of hawthorn, heather and grass are very close indeed and there could be an ancient etymological connection stemming from the root - elar.

The word abi - bilberry, or whortleberry seems to be an integral part of the Basque plant world, indeed, according to Azkue's dictionary in old Vizcayan (i.e. 16th and 17th century Vizcayan) abe or habe came to be synonymous with the general concept of tree and tree-trunk. According to López Mendizabal, abi could be an ancient²⁹ Ice Age root, giving rise to words like abar - branches, foliage, abari - kermes oak.³⁰ Yet, the dialectal forms make us think again for we have - ahābe in Souletin, and Vizcayan: afi, arabi³¹. In Álava, there was the form - gabi and Pouvreau gives forms like - kafia, kabia whilst Corominas gives the original form as -anavia and suggests a possible Latin derivation. Hence, here too, it is as well to be sceptical.

A central theme in the Basque floral world is the oak tree - (h)aritz. López Mendizabal, as usual, provided his own etymology for it, basing it on

any one of the series of roots designating bracken or fern i.e. aro, ira, ara, ere, etc.³² but leaving his theories on trees aside, there could be another root for this and many other words for trees in Basque. It is tempting to think that it could be based on the Basque word for stone, rock or flint - i.e. (h)aitz for the description of the oak as hard and durable has made it as characteristic of any Stone Age society as stone itself. This word for oak-tree (h)aritz appears in the various dialects as ha(r)itx, in Souletin, araitz/areitz in Guipuzcoan, haitz in Labourdin and in Roncalés, Vizcayan and Meridional (or Southern) as aretx³³ these variations are important when dealing with the root which could possibly be one of the best candidates yet for being a remnant from the Ice Age.

THE SUFFIX -ATZE.

There is a set of suffixes which appear throughout the Basque floral lexicon and they are variously, -atz, -ats, -atze, -aitz, -itz, -oitz, -uitz, and sometimes as -az and iz³⁴. All these suffixes could be forms of -atze - plant or tree and this word is still used separately in Labourdin, Souletin and Roncalés although more in composition as if it were nothing but a mere suffix. However, it is rare today but in Roncalés, pine trees are known as -lerratzeak, silver fir trees as -izaiatzek and hazelnut trees as unratzek and one hears atze used separately in Roncalés i.e. "Atze andiak daude kalako oisanean" - there are big trees in such and such a forest.³⁵ The interesting point here is that it can mean a plant also, in fact, anything that grows. It occurs in widely disguised forms, especially in the many variants of the Basque generic word for tree - i.e. zuhaitz, zuaitz, zuaritz, (this last form could have been the original form of (h)aritz - oak tree) with the h- coming in to ease pronunciation later on or the h- could be a remnant of that consonant brought in to ease pronunciation of the 2 vowels zu-h-aritz with the zu- dropping off later on), zuhartze, zuhatz, zugaitz, zuga and zularitz³⁶ - there are others like zuhamu - but this contains a different root suffix.

In many languages, the concepts of wood, tree and oak are closely linked especially in the Indo-European languages. However, as regards -aitz as a suffix, we see words like -urraitz in Vizcayan and Guipuzcoan which is a contraction of -urraritz - hazel-nut tree with -aritz - here fulfilling the role of the generic term.³⁷

Atze or aitz could have been one of the words used to designate the shrubs and primitive plant life characteristic not so much of the plains to the north of the mountains in south-west France but perhaps more of the regions higher up in the Pyrenees where the higher altitude ensured that vegetation there did not grow extensively even during the warmer interstadials.

However, there could be an alternative explanation as to why many words for trees appear to be based on words for older and more primitive cold-climate flora.

It could be argued that for the Basques and their ancestors who were responsible for the Neolithic pastoral Pyrenean Culture, the mountains have been their primary area for nigh on 7,000 years and consequently they would have been far more accustomed to living in areas of higher altitude and sparse vegetation than down on the heavily forested plains to the north which would have become very secondary areas, indeed, for them.

Hence, the practice of forming words for green-forest flora in this way could be relatively recent in fact but there could be some objections raised to this seemingly sensible theory. Namely, why wait until the beginnings of the domestication of animals and the start of pastoralism around 5300 B.C. to form these words when the archaeological evidence would suggest that the ancestors of the Basques and possibly the language too had already been in the region for thousands of years? Secondly, green-forest

vegetation had been around down on the plains and in the lower mountain valleys since the climate began to warm around 9000 B.C. And thirdly, archaeologically, it would appear that during the Mesolithic era (i.e. 9000 B.C. to roughly 5300 B.C. in the area), the Pyrenees were inhabited far less than at any time before or after. Also with the end of the last glaciation the snows again covered the mountain tops from 1,100 metres upwards hence all regions above this level could not have been continuously inhabited during the Mesolithic Age. If this is so, then where were the people and what type of environment were they accustomed to living in? We know that with the spread of the forest, the population declined and was isolated - the forest seemed to break the unity of the tribes, and it would seem that from the disappearance of Cave Art in the western and central Pyrenees as everywhere else, and from the scarcity of Mesolithic settlements in the Pyrenees, the mountains ceased for a while to be the primary area for the local peoples. This could indicate that the language or languages were spoken further down to the north of the mountains where the forest vegetation predominated. Hence, these lower lying and more forested area could have been their primary region for possibly a few thousand years before pastoralism eventually got underway. Consequently, the Basques' acquaintance with the forest flora could have pre-dated the start of the Neolithic Pyrenean Culture.

SOME WORDS FOR FAUNA

Having discussed names for flora, it is now necessary to look at the words for the fauna of the region.

As the climate warmed, the older Ice Age animals like the woolly mammoth, bison or woolly rhinoceros disappeared or like the reindeer and the stag migrated northwards and were replaced by the elk, the roe, the aurochs, the ibex, chamois and forest-dwelling red deer.

However, as regards the names of these animals, there is no reason to assume that simply because Basque possesses words like -orein - stag, orkhatz - roe, basazezen - aurochs, basurde - wild boar, ahuntz - goat and zaldi - horse, some of which designate animals that have existed in the Pyrenean region since the Upper Palaeolithic like the horse or early Mesolithic (with the change in climate) that these words originated in those early times also. Yet it could also be stated that there is no evidence suggesting that these words do not go back that far.

It has been suggested that some of the words originally used to name animals like woolly mammoth, woolly rhinoceros or bison and musk-ox either fell into disuse when these animals died out or through time were given to describe the new type of warmth-loving, forest-dwelling animals.³⁸ For instance, could a word like zezen - bull have originally described a musk-ox which was native to the previous sub-arctic tundra? What would they have called a bison? We will never know but do the names for this kind of cold-climate fauna still survive in Basque today but heavily disguised and meaning some other animals?

There are some native Basque words for species which apparently have been inhabiting the region since the Ice Age. For instance, we have the bones of the pottok - the Pyrenean horse, seen depicted in the Upper Palaeolithic cave paintings at Ekain in Guipúzcoa. We also have the bones of the betizu and the isard or izarti - the chamois, or ibex. This last word, for instance, is interesting because it falls within that small category of words which seem to have been old Basque words but have been lost in modern Basque. These words, however, have been preserved in the adjacent Romance languages of the Pyrenees - Gascon, Catalán and Navarro-Aragonese. We could consider these words in principal as being "Pyrenean" words.

Isard appears variously as isart in Catalan izar(t) in Gascon, uzart or uzar(n) in Provençal, and izard in French.³⁹ The chamois or ibex could have existed in the Pyrenees even before the change in weather to warmer conditions for it is relatively adaptable and has been well suited to the rugged mountainous terrain of the Pyrenees since the Solutrean era of the Upper Palaeolithic Age. Indeed as early as the Magdelenean era, in the cave of Altxerri near Orrioin Guipúzcoa among the 100 or so animals depicted there is the classic Pyrenean mountain goat showing already the unique Pyrenean type with the different shapes and curves of the horns as distinct from the Alpine type.

W. Meyer Lübke gave isar as the proto-form⁴⁰ and Wilhelm Giese provided an etymology for it by relating it to Basque izar - star and any animal which has a parting in Basque is called izardun,⁴¹ but all this proves very little. All that can be said is that it is just possible that the existence of the word outside the Basque speaking area today elsewhere along the Pyrenees, could suggest that the word is as old and as native to the Pyrenean region as the animal itself.

As regards names for fauna, nothing can ever be proved. The fact that during the Cantabrian and Basque Solutrean era (19,000 - 14,000 B.C.) the main animals represented in the sites in the Basque Country or rather in the rugged inland valleys of the area were ibex, chamois and smaller fur-bearing animals like the fox (Vizcayan -azeari, azebari, azegari, azagari or simply Upper and Lower Navarrese azezeri, azari)⁴² does not mean that the people then called these animals by their modern-day Basque names. Even if they did speak some ancestral variant of the Basque dialects of today, they might have described these animals by some other names.

Admittedly, if there were no major social upheavals which any new invasions would have caused in the Franco-Cantabrian area with the change of climate at the end of the Upper Palaeolithic, it would seem to have been the only natural thing to do for the native peoples of the area to adapt themselves to the changed environmental conditions (as archaeology would suggest) and with this to modify the vocabulary of their language or languages by forming new words to designate the warmer flora and fauna around them. In fact, the language itself and its apparent tendency to form new words in this way could be the most accurate indicator as yet of the very lack of new infiltrations into the region by other unrelated peoples speaking unrelated languages.

WORDS FOR TOOLS AND WEAPONS - HAITZ-

As regards the Ice Age population and their tools and weapons, the Upper Palaeolithic was notable for a great expansion in the use of bone and antler mainly for hunting gear and a new method of flint-flaking that produced long narrow blades which were often used to prepare further tools in bone or wood. A great variety of tools were made in flint and similar materials i.e. chisels, points, awls, burins, engraving tools and a variety of flake-scrapers and it would be worthwhile looking at the Basque language to see whether anything of this could be reflected in certain words.

The suggestion that the language might indeed contain certain ancient elements which could go right back to the Stone Age was first made by the Basque priest, Emmanuel Theodore Inchauspé (1816-1902) in the year 1875.⁴³ In his article, he stated that the presence of the word (h)aitz meaning stone or flint as the root of many words designating sharp-edged, cutting instruments for domestic and farm work was a sign that these tools were all originally made of polished stone long ago. However, he referred these words to the Neolithic Age since this was the age when polished stone hand-

tools were perfected and Barandiarán also did the same later on in 1953.⁴⁴

In Basque today, we have words like (h)aitzkor - axe, (h)aitztto - knife haitzur variously applied to a hoe, mattock or any digging tool like a pick or a spade, (h)aitzturrak or gudizeak, scissors, (h)aitzkon - dart, haitzortz - bill-hook, (h)aitzkoltto - hatchet, zulakaitz - chisel and elsewhere in words like - ezten - awl, geztera - a stone for filing or sharpening. Finally, there is even a verb - (h)aitzkatu - meaning to attack.

Admittedly, it is well nigh impossible to prove that the word haitz goes right back to the Ice Age but, at the same time, it could be a grave mistake in assigning all the words with this root to one particular age like the Neolithic. The whole point is that these words need not have been created at the same time because many of the objects which they designate seem to belong to cultural stages older, and, in a few cases, later than the Neolithic. For instance, although the polished stone hand-axe is one of the main characteristics of the Neolithic, unpolished flaked stone hand-axes were made during the previous Mesolithic Age for they appear in the Mesolithic Azilian sites on the northern side of the Pyrenees. It could be argued that the hoe or mattock - haitzur, is an agricultural implement and as such could not pre-date the Neolithic. However, earth-working tools are thought to have been used for burying the dead during the Upper Palaeolithic Age and for flint-mining. The pick is also associated with the later Mesolithic Asturian shellfish culture along the Cantabrian coast and adze-like picks still show on their flake scars, traces of tannin from the bark of trees - hence picks could have been used for gathering bark to tan hides and skins during the Mesolithic. Also, antler mattocks are a feature of Mesolithic traditions. Chisels, awls and stone knives or flint for scraping are just as much a feature of the Magdalenian and Solutrean as they are of the Neolithic Age. Bill-hooks, however, are used for pruning and, indeed,

the word haitzortz could be assigned to the Neolithic or even later.

At this stage, it must be considered that the practice of forming words for sharp-edged implements could only be a recent phenomenon in Basque - as recent as the Roman period or even the Dark Ages. We shall never know but the idea of assigning this trend in the language even to the Neolithic may be all too fantastic. The fact that chisels and chisel-ended tools have been found at the Magdalenian level in the cave of Urtiaga in Guipúzcoa does not mean that the word used to designate them today - zulakaitz goes back to that dim and distant era even if the word cannot be traced to any recognizable foreign word.

Yet, one cannot help but suspect that there is something basic and ancient in the mentality behind the formation of these words i.e. haitztto - a knife - seems to mean literally - small stone or flint (-tto being a diminutive suffix even if it can be related to similar diminutives in Castilian Spanish). Haitzortz - a bill-hook means - a stone tooth, haitzkor - axe, means a raised stone, haitzur and haitzturrak both mean a stone (or small stone) for pulling to pieces. The verb haitz/ka/tu - to attack contains the idea of throwing stones with -ka being a suffix denoting continued or insistent action. Ezten - an awl could be basically ezto or haitztto - a small stone and, as such, could, at least, reflect a mentality reminiscent of the age of stone and flint scrapers i.e. the Magdalenian period. Haitztto means knife today but it could originally have been nothing more than a small stone or flint, sharpened for cutting up prey or used to sharpen or chip bits off other stones to make new tools and as such it could go back beyond the Mesolithic to the Magdalenian era. The Upper Palaeolithic was the age of graving tools in a great variety of forms - a type of tool important for the working of antler and bone as well as engraving ornamental designs and graphic art.

However, there are a few words which could indicate that they were formed later than the Neolithic i.e. (h)aitzulo or cave. It could mean a hole (zilo or zulo) in the rock or stone. However, the word zilo/zulo is reckoned by Michelena,⁴⁵ to have been one of the very few borrowings from the Indo-European languages or more specifically from Celtic. The first Indo-European waves into the Iberian Peninsula occurred with the Late Bronze Age Urnfielders, who came in via the eastern Pyrenees and up the Ebro valley starting at around 1000 B.C. or 900 B.C. and they were followed later by the stronger Iron Age Hallstadt invasions at around 600 or 500 B.C. Hence, the formation of this word could be assigned to any period later than 1,000 B.C. thus making it a relatively recent invention in Basque. Indeed as regards haitz itself, some say that there is no proof that it even goes back as far as the Neolithic Age for haitz is sometimes listed among those words thought to have a Celtic or Indo-European or Romance derivation by Roslyn M. Frank.⁴⁶

We also have the word marraitz - a scraper or engraving tool based on the word - marra - line, mark or scratch. It has given us a whole set of derivatives like the verb - marraztu - to draw, engrave, depict or sketch and marrazki - a drawing or engraving but Michelena thinks that the word - marra could derive from Romance barra.⁴⁷ It could even come from Latin - marco, marcare. Hence, this word too, although it looks ancient, could only be a recent occurrence in Basque.

As regards (h)aitzkor, Haitzkol and Haitzur Gorostiaga⁴⁸ derived them both from Latin asciola and ultimately from a proto-form aiscola and Michelena admits⁴⁹ that this is a possibility.⁴⁹ However, the word does seem to contain the root-word haitz and it is unlikely that these words were composed long after the Neolithic due to the basic character of their formation and what they appear to signify literally. Nothing could

really have been more basic beforehand i.e. for the ancestors of the Basques to have had other words for axes, hatchets, chisels, knives, awls and burins before and then to have gradually discarded them in favour of new words based on the root -haitz seems to be unlikely.

One could argue that just because a word has a very basic composition. it does not mean that it is ancient for we encounter similar words in English or German i.e. English - loudspeaker and German Krankenhaus for hospital. Hence, some of these composite formations could have been fairly recent even in Basque.

Another word of interest in Basque is azkona or haitzkona. Today, this word signifies a dart but if it is an ancient integral part of the Basque lexicon, then it could originally have described any sharpened throwing weapon or at least ^{SOMETHING} ~~have been~~ used for striking by holding it in the hand. However, it might not have described a weapon or throwing stick at all originally but a tool i.e. just what the word is thought to suggest literally i.e. a stone point or a stone sharpened to a point and used to prepare further tools in bone or wood long ago. Whether this could go back to the Magdalenian era is very hard to say. Yet, it is possible that these haitz-based words do form part of the older lexical strata of Basque because the Basques seem to have inhabited the same stretch of territory for thousands of years and appear to have assimilated the various cultural phases in one spot rather than having moved around from one area to another and the fact that other languages in Europe do not form words designating stone implements in this way could be significant. However, a possible parallel etymological development had been suggested by Arturo Campión and Carl Darling Buck in the Germanic languages.⁵⁰ In Old Norse, the word for modern English hammer is hammar and this has been compared with Sanskrit - acman, Lithuanian - akmuo and Old Church

Slavonic - kamy. In Old Church Slavonic, kamy (kamen in Polish and Kamien in Russian today) means - stone - and this too could be a reflection of when hammers were still fashioned from stone. The practice of using the word haitz to form words for new technical innovations might already have been quite common in Basque by the time the pastoral and agricultural Neolithic era began in the south-west of France, the Pyrenees and Cantabria at around 5300 to 4000 B.C.

Haitzkon might originally have referred to the stone point or tip of a dart or spear or of any throwing stick and later it could gradually have come to designate the whole weapon itself. However, all this is extremely hypothetical for we shall never be certain and moreover, haitzkona or azkona has been linked by Meyer-Lübke with Provençal dukona or aucona.⁵¹

HORTZ

Another word which could be relevant to the pre-Neolithic times and which seems to have given rise to some important derivatives is hortz - tooth. However, besides meaning tooth, it can also signify a sharp point, a barb of a hook, a prickle, spike, spine or a quill. The Basque word today for a needle is orratz which resembles hortz in form. Orratz today can also be a pin or a clip and lastly, it can be a graver or a burin.

However, it is its significance as a needle which should be noted. The first eyed needles made their appearance in south-west France during the Upper Solutrean⁵² i.e. 16,000 - 14,000 B.C. and eyed needles for sewing were found at the Magdalenian levels in the caves of Aizpitarte, Urutiaga and Ermitia in Guipúzcoa.⁵³ They also appear in the subsequent Azilian forest culture (although slightly less so) but again all this does not necessarily prove that the word is that old for bone needles existed right down to the late Middle Ages everywhere in Europe. However, there could

be grounds for orratz possibly being as old as the Upper Palaeolithic or, at least, the Mesolithic. This again is due to the basic composition of the word for if we are to believe that this word is, indeed, derived from hortz then it would mean that it could reveal the material from which it was originally fashioned and it is unlikely that any other word could come as close as this in describing the object. Here, we have what appears to be the oldest possible way of designating a needle as regards its root but what is the link, if any, between tooth and needle? The word hortz today also refers to the teeth of a comb or the prongs of a fork and these are long enough to resemble the shape of a needle. Admittedly, this association, if true, could again be only quite recent, perhaps even Medieval.

Also, the word for a comb in Basque today is orrazi and this, too, like orratz looks to be connected with hortz. It could more likely derive from hortz via orratz. It was Bähr who first proposed that orrazi could derive from orratz⁵⁴. All that can be said here is that this word could with the suffix -i be very old and if, indeed, orrazi does come ultimately from hortz, it could have its roots in some -lithic age and perhaps it is safer to assign it to the late Mesolithic or Neolithic at the most when it could have referred to a weaving comb. However, bone combs turn up later in the Iron Age in Europe i.e. in pre-Christian Ireland.⁵⁵

Orrazi was described by Bähr in the same work as being basically orratz and the suffix -i and this suffix -i here is intriguing. It seems to fulfil at once the double function of forming adjectives and past participles from nouns i.e. gatz -salt and gaz/i - salted or salty, bitz, (p)hitz, a verbal root meaning to animate, resuscitate or enliven and biz/i - alive or living. It seems to describe the quality or result of any concept or

substance or the state resulting from any verb and as regards orraz/i (cf. hortz) - something made out of or consisting of a row of teeth i.e. the product shaped in such a way, we encounter the same suffix. Nevertheless, the ending could be -zi rather than -i and could be reminiscent of the frequent plural collective suffix - tze referring to the teeth (hortz) in the comb.

Lastly, we also have the term orrikak - pliers, pincers, tongs or forceps. Orri- could represent hortz and -ka a particle denoting continued, insistent or repeated action but the concept of pliers and tongs could be a much more recent, perhaps early Iron Age innovation.

GEZI

As regards weapons which the Magdalenian peoples could have used, spear and javelin points, harpoons, foreshafts and spear throwers were made from bone and antler.

Interestingly, today there exists in Basque the word - gezi meaning arrow, dart, lance or spear. The etymology provided for this word has been varied to say the least, Some believe that it derives from Latin gaesum or gesum⁵⁶ a javelin perfected in Gaul during the Roman Empire and ultimately from Gaulish -gae - a heavy spear. Others would trace it to Late Gothic geis which appears in personal names like Radagaisus and Gaisberhts⁵⁷. Still others like Juan Gorostiaga would base it on Old French - gèse - a pike hence making it a much more recent importation into Basque.⁵⁸

However, there could be grounds for suggesting that gezi could always have been a native Basque word or, at any rate, even if only formed sometime during the last 3,000 years, it could have been formed from a native root. This root could possibly be hezur - bone. This might not be

as fantastic as it sounds for if one looks at gezi, one sees this suffix -i discussed earlier which suggests something made out of some material or consisting of something, in this case an object fashioned out of bone and as mentioned above, during the Upper Palaeolithic (and the succeeding Mesolithic), the leading forms of projectile head were lances or javelins with bone heads. Nevertheless, although an interesting detail in itself, this does not prove that the actual creation of the word gezi goes back that far in time.

However, if this word is a native word, it could appear elsewhere in other words but in disguised forms. It could be based on kazi. This is not some fanciful proto-form for kazi appears as a suffix in the Basque word for harpoon - arrankazi or harankazi and could be taken to mean a spear for killing fish (haran = arrain - fish). Kazi could also mean something fashioned out of bone (hezur). Harpoons have been common in the Franco-Cantabrian region since the late Magdalenian era when the first proto-type, cylindrical harpoons made from reindeer antler were found in the caves of Aizpitarte, Urtiaga and Ermitia in Guipúzcoa⁵⁹ and later on, we find flat red-deer antler or stag harpoons during the Mesolithic Azilian period.

Again, this does not prove that the formation of the word reflects the Upper Palaeolithic or Mesolithic mentality of the peoples of the region, yet here we have a weapon which has been native to the region for thousands of years and designated by means of a native Basque word.

It could be safer perhaps to suggest that the word could echo the later Mesolithic world when fishing and the consumption of shell-fish along the Cantabrian coast-line became more prominent with the Asturian culture there.

As if to contradict everything which has been said so far concerning a possible Ice Age stratum of words surviving in Basque, is it not just too far-fetched? After all, just because Basque has a word for amulet - kuttun (and its dialectal variants buthun or guthun (Leizarrague),)⁶⁰ and amulets have been found in Upper Palaeolithic sites in the Basque Country (i.e. at Bolinkoba),⁶¹ does this indicate that what we have here is a possible Palaeolithic word? It is very unlikely (though not impossible) even if the word cannot be traced back to any likely Indo-European or Latin or Romance root. With many migratory peoples milling around in western Europe during the spread of agriculture and later the Megalithic religions during the Neolithic Age (i.e. 4500 - 2000 B.C.) words like kuttun could have been borrowed not necessarily through any invasions into the Basque area but simply by contact.

THE LINGUISTIC SITUATION DURING THE LATE UPPER PALAEOLITHIC AGE

Having examined possible candidates for an Ice Age vocabulary and having dismissed others, it is now necessary to try to envisage what the linguistic situation could have been like in the Franco-Cantabrian area during the Magdalenian and possibly earlier during the Solutrean supposing that certain elements in Basque today do really evoke the world of 14,000 to 10,000 years B.C.

It is generally agreed that Basque today constitutes the last surviving remnant of some language or series of languages which were once more widespread.

During the pastoral Neolithic from the evidence provided by pre-Indo European place-names ending in -os, -osse, -ous, -ost, -oz, on the French side of the Pyrenees and their equivalents in -ués, -ueste on the Spanish side⁶² together with the rate at which they increase with the frequency of

blood group O,⁶³ it seems that the language was spoken from Vizcaya and Alava in the west right along the Pyrenean chain to western and northern Cataluña and up onto the plains of Aquitaine. However, this is relatively recent and during the Neolithic, the Pyrenean pastoralists were surrounded almost on all sides by unrelated peoples who had arrived with the spread of agriculture. 5,000 or 6,000 years earlier, however, during the age of CAVE ART, the picture must have been altogether different.

There is a slight possibility that something approaching a series of inter-related dialects and languages might have existed thinly in the area stretching from western Cantabria and Eastern Asturias through the Pyrenees and on up to south-west France i.e. the Dordogne area and south-central France and possibly as far east as the Rhône Valley.

However, was Basque always spoken in the western and central Pyrenees and Cantabria during the Upper Palaeolithic or was it brought into this area at some time during this period? Was there a central point from which it emanated? If so, who, then, did bring the language into the Basque Country?

In an effort to answer this, it could be possible to locate archaeologically the people who could have done this.

The Magdalenian is basically the work of reindeer hunters and during the final cold phase of the Late Glacial period, reindeer ranged as far south as the eastern part of the Cantabrian mountains, the Pyrenees and the south of France. Also, there were reindeer migrations from lowland Aquitaine north to the west of the Massif Central.

If we look at the central Pyrenees during the Magdalenian era, we see that for the people who lived there, east-west travel on either side would have been difficult, but more so on the French side where the long parallel

ridges running out from the central spine are much more extensive. Hence, east-west communication in glacial conditions would have been practically impossible. Only north-south routes along the glacially eroded valley bottoms would have been open i.e. from the basin of Aquitaine south towards the Pyrenean chain.⁶⁴

The period to which most art in the Pyrenees belongs is the Magdalenian era (although, admittedly there are one or two instances of previous Gravettian work at Gargas and Tibiran near Aventignan, and one gallery in Les Trois Frères in Ariège and one of the 3 galleries in Le Portal are thought to be Solutrean) and the Magdalenian people even in that distant age, are thought to have had a mobile economy thousands of years before the start of the pastoralistic economy based on sheep and goats. This mobile economy followed a seasonal pattern along the north-south routes being based on the seasonal migrations of the reindeer. In the summer they travelled south, following migratory herds of reindeer into the Pyrenean valleys, and in the autumn or winter, they would have made their way back north down onto the plains of south-west France.⁶⁵

Until the end of the previous Solutrean period i.e. circa 14,000 B.C., there was very little occupation of the central Pyrenees because morains and glacial conditions kept people out of these valleys. However, in contrast to the periods that precede it, the late Magdalenian was a period of intensive mountain occupation as seen in the Pyrenees and also in the Swiss Alps. By the last stages of the Würm glaciation, the glaciers were in steady retreat and late Magdalenian settlers penetrated the mountains by way of the liberated valleys. In the Pyrenees, few of their habitation sites are known above the 650 metre line, and only a few open air settlements are known. Magdalenians here lived deep inside caves regardless of the lack

of daylight but they were well sheltered.

In the central Pyrenean group of caves, the dates are from the later stages of the Magdalenian and most are of Magdalenian 4. The reindeer though seldom depicted in Magdalenian 4, provided nearly all the bone and antler for tools and decorated objects and a high proportion of the meat supply (with horse and bison constituting the alternative forms of meat). For most of the period during the Magdalenian, the Pyrenean region was very cold and dry and this could be significant as regards the formation of the Basque woods for the later warmer green-forest vegetation, for down on the plains to the north, the climate must have been fairly similar to the climate in the mountains i.e. a sub-arctic climate with sparse flora.

Nevertheless, where did these mountain colonizers come from? Artistic styles in the Périgord region in the Dordogne area and the Pyrenees have similarities and suggest some cultural contact between the 2 areas. In the Périgord area of the Dordogne, there are no fewer than 127 sites and this large number of decorated caves and rock-shelters shows a prehistoric preference for this area. Moreover, as mentioned earlier, at no time was the climate severe enough to make this region uninhabitable. Half of the Périgordian sites are pre-Magdalenian i.e. Pech-Merle, Le Roc and Lascaux are Solutrean. However, the Cave Art here in Périgord pre-dates the art in the Pyrenees by thousands of years. This Périgordian Cave Art goes right back to the early Gravettian period of 25,000 B.C. and there are cave artifacts with representational art going back as far as pre-30,000 B.C. and pre-31,000 B.C. which are, therefore, Aurignacian.

In the other area of Cantabria, the decoration of sanctuaries goes back only to the Solutrean and early and late Magdalenian i.e. Altamira has polychrome paintings which are not earlier than the late Magdalenian.⁶⁶

In 1923 P. Bosch Gimpera stated that the Basque-Cantabrian element represents an offshoot of the inhabitants of the south of France⁶⁷ and, indeed, the distribution of Cave Art and the dates associated with them could suggest that the Basque language was brought and kept in the Pyrenees and Cantabria by those migratory reindeer hunters when they settled down there in the late Solutrean and early Magdalenian periods. The Basque language might have been carried out from some nucleus probably in the Dordogne where the cave sites are older.

Hence, there could have been a constant interaction between the Pyrenees and the plains of south-west France and the Dordogne long before the start of the pastoralistic tradition in the early Neolithic period.

However, if any migration and settlement did take place from the Dordogne area down to the Pyrenees and Cantabria, it could have taken place slightly earlier than the age of the reindeer economy during the Magdalenian i.e. it could go back to the Late Solutrian at around 15,000 or 14,000 B.C.

We know that the Solutrean originated in south-west and south-central France and spread from these to the Pyrenees, Asturias and Cataluña and it was confined to the Franco-Iberian area.

Hence, could the cave paintings in Asturias and Cantabria indicate a further expansion westwards along the coast from the western Pyrenees or the Dordogne in Late Solutrean times? If so, then the Basque language

could have been brought to Cantabria by this movement.

This is all very hypothetical but in the next chapter, we shall examine the subsequent Mesolithic period and how Upper Palaeolithic man's adaptation to it could be more properly reflected in the Basque language of today.

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CHAPTER 2.

The Mesolithic Age.

The purpose of this chapter is to find out if something of the succeeding Mesolithic Age could also be reflected vaguely in the Basque language of today. If, in the previous chapter, any attempt to see whether Basque echoed the world of the Late Upper Palaeolithic was rather far-fetched, here with the Mesolithic, we could be on firmer ground. The Upper Palaeolithic covers a time-span so vast and so remote that even if the Basque language has its root in that dim and distant era, any such traces would most likely have been washed away long before now. However, with regards to what Inchauspé said concerning the possibility of there being a Neolithic layer of words in Basque,¹ what we are dealing with here could be called the immediate pre-Neolithic era in the region from Cantabria up to the Dordogne in France and consequently a period to which some elements in Basque would be more likely to refer.

However, before going on to describe how the language could evoke the Mesolithic Age, it must be stated, at this point that the Mesolithic era refers to the post-glacial period from roughly 9,000 B.C. down to 4,000 B.C., that is until the first Neolithic agriculturalists can be discerned in western Europe. The Mesolithic is sometimes called the Epi-Palaeolithic and to some extent has been interpreted as the attempt by the local Magdalenian population of western Europe or their descendants to adapt themselves to the changed climatic conditions of post-glacial Europe.²

The Mesolithic Age gradually emerged with the end of the Pleistocene Ice Age as the Scandinavian ice-sheets began their final retreat some time between 8,300 B.C. and 7,900 B.C. This is not a contradiction of the dates for the start of the Mesolithic period given above but it could be

argued that the processes associated with the Mesolithic had their beginnings well before the end of the Pleistocene and that the economic changes which mark the Mesolithic are, in most instances, simply intensifications of these processes.³ Also, what we term the Mesolithic can be identified at various times in different parts of Europe with the change from sub-arctic tundra conditions to a temperate forest environment. This requires a brief discussion of the importance of climate.

It seems certain that in France every change towards warmer conditions began in the south-east and then spread to the rest of the country, initially leaving little pockets of cold here and there on the mountain ranges and in their immediate vicinity.⁴ The Magdalenian was able to continue where the reindeer had not entirely disappeared in these areas because of the persistence of relative cold there. Indeed the Mesolithic itself first began in the south-east of France on the Mediterranean coast at about the end of the Allerød interstadial and the further inland one went the longer the Upper Palaeolithic persisted.⁵

The first warmer climatic phase of the post-glacial period or Holocene is called the Pre-Boreal in the Pyrenees and it lasted from roughly 7,250 to 6,450 B.C. This was followed by the more arid and continental Boreal phase from 6,450 to 5,450 B.C. which was followed in turn by the wetter, warmer and more oceanic world of the Atlantic phase from 5,450 to 2,750 B.C.

As to the changes which the climate wrought on the flora and fauna of western Europe and the consequent effect which it had on the economy of the local population, this can be seen in several ways.

Around 9,850 to 8,850 B.C. there was a temporary increase in warmth during the cold Late Glacial Period and this was called the Allerød Oscillation or Interstadial. This allowed forest trees to establish

themselves for a time in the ice-free zones.⁶ This, however, was only a brief phase and it was not until around 8,300 B.C. when the rise in temperature replaced the sub-arctic tundra and open grasslands with warmer green-forest vegetation in the low-lying areas of Europe but not on high ground and marshes.

A change in weather meant not only a change in flora but also a change in fauna which naturally affected the human population and their traditional hunting economy. The open ground on which the herds of large-cold-loving mammals like reindeer and bison would have grazed rapidly became a closed forest landscape and this had a profound effect on the kind of animals now available for hunting. Reindeer, horse and bison gave way to such sylvan species, as red deer, roe-deer, elk, aurochs, wild pig and wild cattle.

This impelled the local population to move (if they did not want to change their way of life) and go northwards after the animals which they used to hunt. Or if man decided to remain in the same place, he had to change his mode of existence and adapt to the changed ecological conditions in order to support himself. However, not all the cold-climate animals migrated northwards with the retreat of the ice-sheets for fauna which have been traditionally associated up until recently with the Pyrenees like stag, ibex, chamois, deer and bear etc. remained in the area going up the mountains where the disappearance of the glaciers gave way to a vegetation not improper to a cool-climate fauna.

However, it must be said that the impact of ecological change varied regionally just as did the changes themselves. In the more southerly territories of the present temperate zone like south-west France where some tree cover was probably already present during the Late Glacial Period in the shape of a few well-separated trees, the change was less marked than in more northerly areas.

From the end of the Magdalenian era to the beginning of the pastoralistic society, at around 5,300 B.C. there were less possibilities of communication within the Pyrenean valleys and between these Pyrenean valleys and other territories and the main reason for this was the spread of the forest. The forest isolated one hunting tribe from another thereby breaking the unity, both artistic and possibly linguistic, which for so many thousands of years had prevailed between the north-coast of Spain and the south-west coast of France.

Another factor which was to influence future developments in the region was the rise in sea levels as a result of the rapid melting of the ice-sheets for the sea entered the zone between Bayonne and Bordeaux thereby isolating the western Pyrenees from the south-west of France and the Dordogne.⁷

If there ever did exist a linguistic connection between the Pyrenees and the Dordogne stemming from the late Solutrean or early Magdalenian periods, the end of the Ice Age and the resultant isolation might explain why Basque has survived to this day while elsewhere on the plains to the north, related languages (if any) were submerged. The spread of the forest and the way in which it cut off Cantabria and the Pyrenees from the Dordogne area could have resulted in the Mesolithic culture and people in the Dordogne being weakened and hence more vulnerable geographically to ethnic and linguistic absorption by any new elements practising agriculture much later on with the onset of the Neolithic Age in the region at around 5,000 or 4,000 B.C. Meanwhile, Cantabria, the Pyrenees and the low-lying forested areas immediately to the north could have constituted a zone of refuge for the descendents of the Mesolithic peoples there during the Neolithic Age.

The spread of the forest in isolating people from each other produced a variety of regionally specialized Mesolithic cultures and phases. The

fairly homogeneous world of the Upper Palaeolithic became a heterogeneous world during the Mesolithic.

Of the several Mesolithic cultures in Europe, however, only 2 or 3 really concern Cantabria, the Basque Country and the central Pyrenees.

THE AZILIAN CULTURE.

The Pyrenees and the adjacent areas of south-western France constituted the centre of the most highly developed culture during the Late Glacial times - this was the Azilian culture named after the late Mesolithic type site of Mas d'Azil in a valley in Ariège on the northern side of the central Pyrenees with a Carbon 14 date of 2120 B.C.⁸

The Azilian culture was a culture specially⁸ adapted to a forest environment. This culture is seen in the Pyrenees after the retreat of the glaciers and it is sometimes referred to as a terminal Palaeolithic culture⁹ since it falls within the Late Glacial Period around the 10th millennium B.C. and perhaps coincided with the Allerød Oscillation. Although it extends well into the post-glacial period (in some cases it persisted right down to the end of the 3rd millennium B.C. as seen at Mas d'Azil) it could be said that it represents an Upper Palaeolithic stage which had adapted itself to very changed climatic conditions.

However, although this cultural level is found in many places in the Basque Country (i.e. at Santimamiñe, Balzola, Lumentxa, Bolinkoba, Ermitia, Urtiaga, Aizpitarte and Isturitz etc.)¹⁰ it also refers to sites far away from the Pyrenees. The Azilian is found in all regions which had been settled in the Final Magdalenian though there may be some slight regional differentiation related to ecological factors. It is seen north of the Garonne, between the Garonne and Loire rivers, north of the Loire, along the Seine valley and the Paris basin, northern Belgium, England and Scotland, the middle and upper Rhône valley and Alsace and

Lorraine but not east of the Rhône valley or the western Alps. In Spain, it extended as far west as Asturias. However, this does not mean that all these instances of Azilian culture are related but there is one interesting aspect which could tell us something about the language or languages of the peoples of south-west France, the Pyrenees and Cantabria during this Mesolithic phase. This involves the evidence which suggests that almost everywhere in France the Mesolithic was indigenous stemming from the local Upper Palaeolithic or Epipalaeolithic culture. Every Mesolithic site reflects the style of its present¹¹ civilisation but this need not mean that there were no new arrivals of people into Western Europe. If there were some foreign infiltrations they could not have been numerous or strong enough culturally to have been able to impose their languages on the natives of south-west France otherwise we would have detected them archaeologically. Also what is interesting here is that the distribution of the Azilian in the Pyrenean settlements coincides, in some ways, with what would later be called the Pyrenean Culture of the Neolithic involving pastoralism.

Hence, there is a strong possibility that as the Late Magdalenian changed into the Azilian, the language or languages of the Magdalenian might have survived and evolved also. With the subsequent decline in the overall human population during the Mesolithic due to the spread of the forest and the replacement of the large numbers of big game animals by far fewer solitary forest-dwelling animals less susceptible to mass slaughter thereby making food less readily available,¹² many of their languages would also have died out with them with very little indication of change in the ethnic make-up of the population, but many languages would have survived.

Sites yielding material transitional between the Final Magdalenian and Azilian are still rare and their industries still imperfectly known

but a good example in the area is the proto-Azilian of the La Vache cave where a flint industry already very Azilian in style is associated with some flat, red-deer antler harpoons found there.¹³

This leads us to a brief description of the Azilian culture and its characteristic artifacts and to see whether there is a stronger case for assigning certain words in the Basque language to this era.

THE AZILIAN CULTURE AND ITS ARTIFACTS.

The Azilian was almost in every respect inferior to the Magdalenian although in their basic way of life and means of subsistence, the Upper Palaeolithic, Epipalaeolithic and Azilian closely resembled one another for men were still hunters, fishers and gatherers.¹⁴

It was the equipment and art which changed for weapons and tools were evidently adapted according to the changed environmental conditions. At Mas d'Azil, where the Magdalenian levels are overlaid by the Azilian industry, the Azilian was characterized by microlithic tools. The tools are of the same form though smaller and would seem to serve the same purposes but the antler and bone industry was greatly diminished consisting only of flat-red-deer or stag antler harpoons¹⁵ with a barbed head and awls and scrapers.

Though the Azilians, almost without exception, occupied the same caves as Magdalenian men, they apparently gave up blazoning their walls and roofs with representations of their prey.¹⁶ Instead, all we have are a few traces of incised lines and zig-zags on pointed bone objects and river-worn pebbles, painted with dots in red ochre or engraved with abstract, geometrical designs consisting of broken or undulating lines.

The Azilians buried their dead for graves at Mas d'Azil were in simple pits containing skeletons still coated in red-ochre.

One of the most characteristic artifacts of this culture was the harpoon and it is the Mesolithic rather than the Palaeolithic which is regarded as the age of the harpoon. During the Pre-Boreal period, the climate became progressively drier during this relatively short phase. In the south-west of France, following the disappearance of the large game and while there was still forest, or at least heavy woodland along the watercourses, the streams in fact grew clear enough to allow fish to be harpooned easily. Although the harpoon was used in the Upper Palaeolithic the Basque word for it - arrankazi or harankazi if it does predate the Neolithic would more likely refer to the Mesolithic when the harpoon came into prominence as man increased his reliance on rivers as sources of food. Admittedly, one can only guess as to what kind of weapons man might have used in order to fish for food during the Mesolithic Age and even if he did use harpoons, it is equally possible that he would have called them by some other name. The word arrankazi could even have been formed only recently with the growth of the Basque whaling industry in the 12th, 13th or 14th centuries A.D. However, we do know that fishing in rivers and along the coasts increased during the Mesolithic and the bones of deep-sea fish can be seen in the middens of most Mesolithic sites in Western Europe i.e. the Tardenoisian sites of Téviec and Hoëdic of southern coastal Brittany where fishing in relatively deep marine water increased with the use of boats.¹⁷

THE ASTURIAN CULTURE.

The other Mesolithic culture of significance to the Basque Country was the Asturian culture, a poorer type of coastal culture which came slightly later than the Azilian. This Asturian culture was found along the north coast of Spain and the south-west coast of France, from Asturias to Biarritz. The middens from these Asturian sites show that the Asturian people's diet consisted mostly of shellfish, cockles, molluscs, oysters

and snails seen from the heaps of discarded seashells. Also, this Asturian culture was characterised by the use of a hammer or rather pick made of pebble stone to open the seashells. However, this does not mean that we can assign the Basque word -haitzu(r)- meaning a pick, to the Mesolithic and to this culture but picks or digging sticks were found in the Azilian deposits as Mas d'Azil. They might have been used to grub up roots or more likely to bury the bodies found in the pit-graves there but this is all extremely hypothetical.

It has been suggested that the Asturian was a continuation or local evolution of another Mesolithic culture called the Tardenoisian named after type-site of Pèrè-en-Tardenois in northern France which touched on the Cantabrian region and the Basque Country as seen at places like Arenaza and Marizulo at the end of the 5th millenium B.C. The point is that it is believed that the Tardenoisian there could have been the result of a northward diffusion of the Muge-Arrudian culture, a Portuguese Mesolithic phase, found at the mouth of the river Tagus in Portugal and dated from the mid-6th to the late 4th millenium B.C.¹⁸ This would have involved some movement of peoples along the western and northern coasts of the Iberian Peninsula eastwards to Cantabria and the Basque Country and northwards to southern coastal Brittany for the Spanish Tardenoisian is older than the French Tardenoisian. However, if so, this does not seem to have affected Aquitaine.

If the Asturian people are the result of an intrusion of people from the west coast of the Peninsula this could possibly have had linguistic repercussions in the Cantabrian area for the Asturian people did not disappear. They used pottery in subsequent Neolithic times and the differences seen today between the physical type of fisherman on the Vizcayan coast and that of the farmer further inland to the south (whose base seems to be Magdalenian) might be due to the spread of this shellfish

gathering folk along the Atlantic seaboard. However, the Asturian culture was a weak culture and associated not with inland or mountainous areas but with the coast and it is unlikely that they could have been numerically strong enough to have imposed their language on the whole Basque region especially in those areas where they cannot be detected archaeologically.

THE BOW AND ARROW.

As regards the Azilian and its forested environment the smaller, solitary, forest-dwelling animals which replaced the larger game of the Ice Age were more limited in number and much more difficult to hunt. Wild cattle roamed the forests but unlike the reindeer before them, they do not tend to associate in large herds. Red deer also congregate in small herds and the roe-deer and elk are basically solitary animals.¹⁹ The behaviour of these animals affected the hunting methods and techniques of the human population. The leading feature of the Mesolithic was an abundance of microliths used to barb and tip arrows suggesting widespread and general use of the bow and arrow in hunting. The bow is also evidenced by a number of wooden bow-shafts recovered from sites. Blunt-ended wooden arrows for hunting small mammals have been found also. The bow came into prominence during the Mesolithic since it is a weapon better suited for hunting smaller solitary forest-dwelling species. This might be of interest concerning the Basque word gezi if indeed it represents a native Basque root. The problem is though that gezi could have designated any throwing weapon i.e. dart, arrow, or wooden spears mounted with bone points. If gezi is based on hezur - bone, then gezi might originally have referred to wooden spears mounted with bone points. Gezi or kazi (as in arrankazi) could also have been the name for a harpoon but again this is all conjecture.

Hunting by pursuing on the sub-arctic tundra and grasslands during the Upper Palaeolithic era had now to give way to the hunt by ambush with

the growth of dense forest but this is not to say that the bow was developed in Mesolithic times. Cave painting from the Levante in south-eastern Spain from the Magdalenian era or early Epipalaeolithic period clearly show some human figures with bows and arrows.²¹

Hunting in the forest by means of ambushing the prey also involved hunting with bait, snares and decoys and traps for man now had to hunt the badger, wild cat, pheasants, geese, partridges and doves - this might have been the origin of the dove-hunt or uso-ihizia in Basque today. However, according to J. Altuna,²² this may have been practised as far back as the Upper Palaeolithic in the Basque Country i.e. at or near the cave of Ekain near Deva in Guipúzcoa where the position of the cave is suitable for hunting and capturing animals or birds. The effect of beating would drive the animals or birds down the valley there where they could be caught by means of traps and holes dug in the ground. This practice of digging holes in the ground is still done in the Basque Country today. However, the uso ihizia or uxo ihizia is associated more with the Neolithic Age in the region.

THE DOMESTICATION OF THE DOG

Another significant development during the Mesolithic Age was the domestication of the dog seen from the Mesolithic site at Star Carr in England of about 7500 B.C.²³ The dog provided companionship, watch-keeping and scavenging in return for food and protection thereby making hunting easier for man but one cannot conclude from this that the Basque word for dog - txakur or zak(h)ur goes back to the Mesolithic. However, evidence for the possible domestication of the dog during Magdalenian times exists, seen from the small body size and the shortened facial bones of the wolf.²⁴

THE MESOLITHIC FAUNA.

As far as the animals which were hunted are concerned like badgers, stags, roes and wild boar, although their existence in the Pyrenees from

the Mesolithic era would mean that the local population would have had their own names for them, one cannot automatically assign the Basque words for these animals (which are respectively azkonar(r)o, orein, ork(h)atz and basurde) to this era. Ork(h)atz could, in fact, be a recent borrowing from Celtic iorkos (Welsh - iwrch)²⁵ and the Basque word for bear which was a common animal in the Upper Palaeolithic and the Mesolithic - (h)artz, which appears in the Aquitanian inscriptions as Harsus²⁶ could be a borrowing from Gaulish - artos (Old Irish - art, Welsh - arth). However, one must not be too quick to assign Basque words to a foreign source because Basque forms sometimes tend to dissimilate in form from their Celtic or Indo-European equivalents the further back one goes in time.

MAN AND WHERE HE LIVED.

As regards man and where he lived the caves and rock-shelters which were used during the Magdalenian era continued to be occupied but man now was slowly leaving the caves and beginning to live in open settlements in clusters of huts alongside rivers and streams. Man would perhaps have been seasonally mobile in search of various plant foods but the dense forests now restricted his movements and he could no longer be as nomadic or semi-nomadic as the Upper Palaeolithic big game hunters and gatherers.

This leads us to discuss the trees which made up the Mesolithic forest and the Basque words for these trees.

THE MESOLITHIC FLORAL WORLD.

At about 8,300 B.C. the steady rise in temperature began marking the onset of the Post-glacial period and as the climate changed this led to changes in the plant cover. At first, the forests were composed of trees able to tolerate relatively cold conditions. The cold, fast-growing birch was the first of these pioneer trees to appear. It has winged seeds which

can blow long distances in strong winds and with the favouring southerly gales which accompanied the breakdown of the glacial anticyclone in north-west Europe, it advanced rapidly.²⁷ The willow accompanied the birch at this time.

Pine followed in the wake of the birch and in the Early Boreal (7500 - 6200 B.C.) grew to dominance. It lasted through the subsequent Boreal period and then receded rapidly in the early Atlantic period (5,800 - 3,000 B.C.) before the advance of the hazel which heralded the broad-leaved summer-green forest.²⁸ Hazel, in turn, was gradually overshadowed by more longer living deciduous trees like the oak, elm, lime, alder and beech. All this time the pine kept a steady subsidiary place in the forests but as the Post-glacial climate reached its optimum, it was the oak which finally came to dominate the forests.

As regards the birch tree, its period of predominance in the Basque Country was from roughly 10,800 to 7,500 B.C. which in actual fact was before the end of the Pleistocene Ice Age covering the periods - Older Dryas II, the Allerød Interstadial, Younger Dryas III, and the Pre-Boreal and after 7,500 B.C. it began to fade. The Basque word for a birch tree is (b)urki and it has been regarded by some experts like Schuchardt and Michelena²⁹ as a borrowing from Germanic i.e. the Ablaut form in Bible Gothic - baúrki which later became burki in Bishop Wulfila's 4th century translation of the Gospels and Old High German - birche or Modern German birke (English - birch). They would have us believe that it came in with the arrival of the Visigoths in Spain at the beginning of the 5th century A.D. Admittedly, burki does, indeed, look as if it comes from Germanic and what swings it in this direction is the presence of the initial consonant b- and the velar -k-. However, it must be added that burki appears in widely different forms in the varied Basque dialects. It can appear as urki (without the initial b-) as buruki and in Lower

Navarrese we have bürkhi, while in Souletin, we find bürkhi but this is not all. It cannot be certain that if there ever was originally an initial consonant it was b- because in 18th century Guipuzcoan, we see the form epurki and in Vizcayan (in Cigoitia) we encounter -turki.³⁰ Michelena also postulates that lost forms like gurki and kurki might have existed in Vizcayan also but disappeared due to assimilation.³¹ Hence, burki may not have been the original form of the word for we see that the word tends to dissimilate in form in the various dialects from Germanic - birche. Michelena, himself argues that the initial consonant could have been originally either t-, g- or k- and in buruki, we see an additional intermedial vowel coming in.

All right, we know that the practice of borrowing names for trees in Basque from other languages down through the ages is not exactly a rare occurrence. We have pago- a beech tree (from Latin fagus) and other words like gaztain and pinu and the Basque word for willow - sahats could be ultimately from Latin - salix via Castilian Spanish - sauce but these are words which are thought to come from Latin and the intake of Latin vocabulary since the days of the Roman Empire has been immense. However, the practice of borrowing words from Germanic is very rare indeed and it is just possible that what we have in (b)urki could be an evolved form of an integral element of Basque floral vocabulary whose original form is now unknown to us.

Burki often becomes urki and this element ur - is a characteristic feature in the composition of many Basque words referring to vegetation i.e. urritz, urondo - hazel tree (cf. ur(r) - hazel-nut), urritziza - an edible mushroom, urkitza - the hornbeam, urbi - strawberry tree, urlo - aspen, the verb - urkul(du) - to open the husk of a chestnut or peel off the cob or ear of corn, urin - juice, yoke or the resin from certain trees (this is not from Latin), urka - sheaves of wheat when they are

crossed and also urkila - the starting point or roots for the branches of a tree. If the -ur in (b)urki (or epurki or turki for that matter) is connected with this element ur- then, the one underlying note here is that the root ur- or (h)urr seems to indicate not so much hazelnut as one would expect but rather any seed in general i.e. something that sprouts or buds or gives off spores. It could also mean a nucleus or kernel. It could signify anything that grows from a seed and hence is connected to concepts like fertility or life and this could ultimately connect it to water - (h)ur meaning a liquid that sustains life or is essential to life.

Alternatively, ur- might be a derivation from the various words for fern or bracken - ara, aro, ere, garo, ira, oro, uda, uru which would make its etymology go right back to the last Ice Age or the very early Mesolithic. It could refer to the initial growth of forest trees because birch parkland was the precursor of the later green-forest vegetation in the Basque Country.

As regards the word for a pine tree - pinu - this is obviously from Latin but there does exist another word in Basque for pine tree - ler or lerrondo which refers more specifically to the Pyrenean woodland pine or pinus silvestris. Meanings of word for trees can change or can come to mean one tree in particular and it is just conceivable that this word ler might have been the common and native Basque word for a pine tree and then later it came to designate the Pyrenean pine-tree as Latin influence and with it, the word pinu, gradually became embedded in the language.

We also have what appear to be native Basque words for elm - zumar and lime tree - ezki. Zumar appears in various forms i.e. zuar, zugar and zunhar and scholars like J. Vinson³² believe that the first element zu could be a contraction of zur - wood used for building. This etymology could be interesting because it could possibly be connected to the Basque word for fire -su leading to 2 very important economic practices - one associated with

the Mesolithic and the other with the later Neolithic and this will be discussed in depth later on.

Besides ezki there exists another word for lime-tree in Basque - zumalakar - again with this zu- prefix. This last word, however, also designates a particular kind of willow and together with 3 other native Basque words for willow - zumatze, zume and zungi³³ what we have here could be integral Basque words as opposed to sahats which as mentioned earlier could be from Latin.

One can only speculate as to how far back these words could go but if Basque was spoken in the Franco-Cantabrian region during the Mesolithic Age from roughly 9,000 to 5,000 or 4,000 B.C. then these words could possibly have their roots in that era. However, if so, they would most surely have been very different in form from what they are today for we are talking about a phonetic evolution spanning 8,000 or 9,000 years.

The alder tree formed part of the Mesolithic forest and the Basque word for it is (h)altza. Could this be a relatively recent borrowing from Spanish - aliso? If so, then it seems that the Spanish word - aliso stems from Gothic and not Latin³⁴. The Gothic word was alisa but if we go back further, the Celtic Alder God was Alisanus from proto-Celtic - alisa meaning a place of alders and this could possibly make the word come into Basque sometime after 1,000 B.C. right down to the Roman period with the arrival of scattered Bronze Age Urnfield elements at around 1000 or 900 B.C. or later with the stronger and much more significant Iron Age Hallstatt invasions into the Iberian Peninsula at around 600 or 500 B.C. Here again, all this is speculation and there is no way or really proving it except by a deep study of Basque phonetics and how the Basques borrow words from other tongues and what changes these words have to undergo as the Basques gradually mould them to suit their own phonetic system.

With the Basque word for a beech-tree - pago or bago, we should perhaps not be too anxious to assign it immediately to Latin - fagus because it could have been so easily an earlier importation from Celtic Bace-nis (from proto-Indo-European bha:go).³⁵

As far as the Basque name for the hazel-nut is concerned -(h)urr, it seems that intxaur - walnut is derived from it and the relationship could go as far back as the Mesolithic. Why the Mesolithic when, in fact, it is equally possible that intxaur could have been formed from (h)urr only quite recently? The answer could be found in a discussion of the hazel nut and its role in a Mesolithic society.

THE HAZELNUT AND ITS IMPORTANCE TO THE MESOLITHIC ECONOMY.

The hazelnut was the most economically significant of the Mesolithic plant species and was found in different locations. Mesolithic communities in the forests supplemented their supply of meat and fish by the collection of various kinds of plant foods.³⁶ They were gathered in season and consisted of seeds, berries, roots and bulbs. There were 2 trees in the Mesolithic forests which would have been very important for man's survival - namely the hazel tree seen from the abundance of broken hazel nut shells on Mesolithic sites, and later the oak tree because both provide acorns and nuts which can last several months and provide food for the winter. The eating of these non-animal food sources could have resulted in the temporary creation of larger population units.³⁷ The hazel nuts would have been collected in the autumn because the lack of vegetation in the late winter and spring would have made it important to build up supplies by storing food at the winter settlements. Among plant foods most favoured for storing are roots, hazel nuts, pine nuts, wild seeds and where the climate is mild enough for the oak, acorns.

The hazel grows best and gives more fruit when it is protected from other trees so man would have to learn to clear the forests if he wanted to preserve or protect a good source of food and both the hazel and the oak are abundant in the Basque Country. How, then, would Mesolithic man have been able to clear the forests in order to retain these vital sources of food? One cannot rule out the possibility of Mesolithic man developing specific equipment for felling and working trees i.e. the hand-axe. Although the hand-axe and the Basque word for it - haitz-kor has been considered as an invention of the Neolithic Age since the Neolithic was the age when the polished stone hand-axe was perfected. The invention of the hand-axe and the Basque word for it could pre-date the Neolithic. In Basque mythology, the symbol of the axe is associated with agriculture and the Neolithic yet in spite of this, the unpolished stone axe appears in Mesolithic Azilian sites when the flaked stone hand-axe is thought to have been used for wood-cutting. Today, the stone axe is considered as being a Mesolithic technical innovation together with the stone pick or digging stick - haitzur.

However, clearing away the forest by using stone axes is a slow and painful method associated more with the subsequent Neolithic Age. There would have been a far quicker and more effective way of doing this, namely, by setting fire to large tracts of woodland. Although clearing away forested areas by means of burning is usually associated with the subsequent pastoralistic society of the Neolithic, there is evidence of the extensive use of fire by the hunters and food gatherers of the previous Mesolithic period. Man had known the use of fire even in Upper Palaeolithic times, not just for burning trees however, but rather for warmth in caves also.

Here, we could look to an interesting detail in the Basque language which has been overlooked by scholars and which could reflect the economic practices of the ancestors of the Basques in the Franco-Cantabrian zone either during the Mesolithic or the succeeding Neolithic Age.

HERRI and ERRE AND THE IMPORTANCE OF FOREST FIRING TO A MESOLITHIC ECONOMY.

There exists a curious similarity between the word herri- land, country, territory or inhabited place and the verb - erre - to burn. If there is, in fact, any relationship between these 2 words, the case for assigning it to the Mesolithic could be discussed in this chapter.

A policy of deliberate and systematic fire-setting by Mesolithic peoples would have benefited them in several ways in woodland or forested environments, besides burning down the surrounding trees in order to protect the hazel and later the oak thereby controlling the spread of nut and fruit trees. In the case of many Mesolithic communities occupying the deciduous or mixed deciduous-coniferous forests and even shrubland environments of early post-glacial Europe, the impact of annual, or, at least, frequent burning would have been one of improving the yields of vegetable or plant food resources.³⁸

Burning could have influenced the production of plant food resources in various ways. Firstly, the total range of plant species present in the habitat frequently tends to increase in the wake of forest fires. Secondly, burning stimulates the continuous growth of most forms of ground vegetation like grasses, bracken, forbs and dwarf shrubs which, incidentally, are known to act as the principal agencies for spreading more fires through forested environments. Thirdly, the increased penetration of sunlight and the addition of rich supplies of nutrients to the soil in the form of ash due to the action of fire may have led to improvements not only in quantity but also in the nutritional quality of plant food supplies. In addition to

this, the gathering of certain kinds of plant foods like fallen hazel nuts which are regarded as a fire-tolerant species or acorns may have been simplified by the clearing away of undergrowth vegetation like dead grass, fallen leaves etc. by the action of fire. Fires sometimes led to the establishment of large areas of hazel scrub. Fire would stimulate the flowering of hazel shrubs thereby increasing the annual production of hazel nuts.

The results or benefits from forest burning, however, are not confined solely to improvements in the quantity and quality of available food resources. The burning of forests had an impact on the mobility of human groups in forested environments and would have made hunting easier for the small family groups for in most areas of mature woodland, both movement and visibility are seriously impeded, not so much by the density of tree growth but by the heavy growth of under-storey vegetation.³⁹ In such forested environments, movement may be restricted to well-defined paths created and maintained only by frequent use. These paths may be all right for settled, agricultural communities but they are no use for a hunting and food-collecting society in the forests where the distribution of food resources is more scattered and much less predictable.

Burning would also have reduced the amount of escape cover available to hunted animals and it would also have controlled the distribution of the animals, thereby making the movement of the animals more predictable and more accessible to the hunters and lastly through the improvements in both the quantity and nutritional quality of available forage resources caused by setting fire to areas of the forests, the total numbers and population density of animals native to a forest habitat like the red-deer would have increased also.

There are other reasons why man would have cleared away large areas of forest during the mesolithic era. Namely the rise in post-Pleistocene sea levels reduced the areas available to hunters and consequently, Mesolithic man could either have intensified his food quest particularly by fishing or could have enlarged his territory by migration through the expansion into areas previously unoccupied in the forest or which had been covered by glaciers during the Ice Age. Hence, here, the word herri in Basque could originally have meant land burnt (i.e. erre) for hunting or fresh territory in the forest newly burnt for habitation.

However, all the economic reasons in the world do not necessarily prove that erre and herri are basically the same word. Even if there is a connection between these 2 words, it could be due to some other reason or one word could have been derived from the other much later on during the Neolithic involving pastoralism but this shall be discussed in Chapter 3 on the Neolithic Age.

ACORNS - (H)EZKURRAK AND THEIR SIGNIFICANCE TO MESOLITHIC MAN.

As regards the use of fire and its impact on the production of acorns from oak trees, there is one interesting aspect which could lend weight to the idea that the acorn was just as important to a Mesolithic food gathering society as it would be later on to the pastoral people of the Neolithic. Fire, as mentioned, facilitated the harvesting of vegetable crops. This was done by setting fire to the vegetation beneath oak trees in order that man could collect the fallen acorns as Indian groups in California used to do.⁴⁰

If the acorn was an important source of food for Mesolithic forest-dwelling people, how far back then does the Basque word for acorn - (h)ezkur go? Does it come from Latin aesculus and hence, is it only a

fairly late occurrence in the Basque language or is it a native Basque word?

It is possible that what we have today with (h)ezkur could be the latest evolved form of a very old Basque word. How old we cannot say yet the acorn came to be almost synonymous with the concept of the oak tree in some Basque dialects like Vizcayan and this could be a measure of its importance either to the Mesolithic or later Neolithic people in the region. The acorn, like the hazel nut, must have formed the staple diet of many communities in the Pyrenees right down to the Roman period. It could be argued that one of the many reasons why the Romans never bothered to subdue the mountainous areas of the Basque Country was that in the mountains the Romans might have run short of food whilst the native Basque or rather Vascon population had always been used to a diet in which acorns and their storage in winter played a large part. In the Roncal dialect today, the word for any kind of food given to sheep, goats or bovine cattle is (h)ezkur but this could be associated more with the pastoral Pyrenean Culture of the later Neolithic Age.

The etymology of (h)ezkur could perhaps be found in the word hazkor - an adjective applied to anything that grows, i.e. something likely to grow, growing or vegetational and as such, it is based on the verbal stem haz(i) - meaning to grow (both transitive and intransitive). Hazi, interestingly, is also a noun meaning a seed or semen. Hazkurri is a noun signifying maintenance, sustenance, food or nourishment. We could extend the root haz- to heze- one of the various adjectives in Basque meaning -green but also more in the sense of humidity. Consequently, we have the concepts of acorn, growing, vegetation, verdure, seed, fertility, life and sustenance or nourishment. We could liken it to the English word - green which is thought to derive from grown - the past participle of the verb - to grow with the idea that everything that grows is green, and, indeed the word

grass is also thought to be connected with green and growth.⁴¹

From all this, we see that hezkur could be very central to the Basque lexicon and to the prehistory of the Basques themselves. However, if all this is the stuff of dreams and if (h)ezkur does, in fact, derive from Latin - aesculus then besides (h)ezkur, we also have another Basque word for acorn which appears in the Souletin, Lower Navarrese and Roncal dialects zĩ or zi (and Michelena gives us the supposed proto-form *zin). It is mostly used as a suffix today in composition i.e. (Roncal) -artazĩ - the acorn of an evergreen oak or holm-oak⁴² (cf. arte - holm oak). How far back this word goes we cannot begin to say.

ZUR AND THE CONCEPTS OF WOOD AND FIRE.

J. Vinson, in an interesting article, discussed the use and possible original significance of the Basque word for wood -zur, in particular, its appearance as zu- as a prefix in many words i.e. in the many generic words for tree - zuhaitz, zuhamu, zuga(i)tz.⁴³ In his article, he suggested that zur itself could come from a root expressing some kind of vertical rectilinear movement or position like a tree-trunk starting from the bottom and working upwards. He also mentioned that z- sometimes becomes -s or ch- and he extended this to the verb -chuti - to stand up, or draw oneself up, or zutitu, zutundu which are dialectal variants of chuti. Also, zutik, or zutunik means standing up and he suggested that this word zur could be derived from su- fire. It sounds rather too far-fetched yet Vinson could have been onto something important for each age, Upper Palaeolithic, Mesolithic, Neolithic, Neolithic and Iron age right up to recently seems to be linked with, at least, one economic activity which connects the concept of wood with fire. For instance, during the Upper Palaeolithic Age in areas where there were some early trees, tree-trunks are thought to have been felled by lighting a fire or bonfire at the foot of the tree. However, it may be a little too presumptuous to add at this

point that the various words in Basque for tree-trunk - zunpur, zubil, subil, zunbil, and zutoi could all contain a remnant of the word -su -fire and could, therefore, be a reflection of this Upper Palaeolithic economic practice.

However, the practice of burning away trees during the subsequent Mesolithic Age when forests became prominent either to protect the hazel and oak trees, or to facilitate hunting or create new space for colonization could reinforce this link between these 2 words. Alternatively during the Neolithic Age, forests were cleared by burning to create new pasture lands for the flocks of sheep and goats and new grazing grounds for the herds of cattle of the Pyrenean shepherds - a practice still continued in the 20th century. This too makes the supposed connection between these 2 concepts much less fantastic.

The original idea behind this could have been one of regarding wood as an extremely useful and, above all, combustible material, vital for the continued survival of prehistoric communities in the Franco-Cantabrian region.

(SU)BIL AND THE EXPRESSION OF THE CONCEPT OF ROUNDNESS IN THE BASQUE LANGUAGE

Another interesting coincidence here is that one of the words mentioned above meaning a tree-trunk - zubil or subil has both an adjectival and a nominal meaning today for subil can mean at once cylindrical or cylinder and a hollowed-out tree trunk is cylindrical in shape but as to whether subil meaning cylindrical was given to designate a tree-trunk or whether the name for a tree-trunk came to be applied to anything cylindrical or which resembled a tree-trunk in shape, we just do not know. The root -bil, however, seems to be the generator of the idea of round, circular, rotund or cylindrical in shape because we encounter it in the Basque adjectives of today - biribil and borobil meaning round.

There is no end to the amount of speculation as to what percentage of Basque vocabulary could pre-date the Neolithic and, admittedly there is no real evidence for this belief, yet one still cannot say that a pre-Neolithic stratum of words in Basque is simply out of the question.

The Mesolithic is complicated for it covers approximately 5000 years of changing environments and economic practices yet Mesolithic man discovered many of the resources of his forest habitat and must have learned to describe his environment and his way of life with a good deal of detail and accuracy. He, even, initiated the process of forest clearance that later Neolithic pastoralists and farmers in the Franco-Cantabrian region would extend and in the next chapter, this shall be discussed along with the Basque language.

Footnotes for Chapter 2

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 17. Patricia Phillips, The Prehistory of Europe, p. 128.
 18. S. K. Kozłowski, 'Introduction to the History of Europe', pp. 336-337.
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28. Patricia Phillips, The Prehistory of Europe, p. 114.
29. Hugo Schuchardt, 'Baskisch und Romanisch', p. 32.
and Luis Michelena, Sobre el pasado, p. 153
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CHAPTER 3

The Neolithic Age.

The purpose of this chapter is not to provide a long list of hypothetical Neolithic words in Basque today although some words which have not been considered before shall be under discussion. A supposedly Neolithic stratum of words pertaining to agriculture, the seasonal divisions of the year and the days of the week together with words for sharp-edged tools and Stone Age farming equipment has already been put forward by men like Barandiarán and Julio Caro Baroja.¹

The real purpose of this chapter is to look at and describe the various characteristic stages of the Neolithic Age and how these stages were gradually introduced into the Franco-Cantabrian zone without necessitating any new and powerful ethnic migrations into the area - migrations strong enough to have been able to impose their language onto the autochthonous Mesolithic population of the region. This is something which could be attempted in order to disprove the theory that the Basque language could not possibly pre-date the Neolithic era in the region and to dispel the idea that the Basques as a race of people or as a distinct physical type are much older than their language.

Today, the common opinion of archaeologists and linguisticians is that the Basques are to be identified economically with the people of the pastoral Neolithic tradition of the region - a tradition called the Pyrenean Culture (5300-2000 B.C.) covering with the Cantabrian mountains and the Pyrenees, the Cevennes and the French Maritime Alps.³ It is generally accepted by men like P. Bosch Gimpera and Barandiarán that the Basque language can be assigned to the Neolithic.³ That Basque could have brought by later migrations seems reasonably excluded. Basque has often been defined as a pastoral language, rich in pastoral terminology but this need not mean that it was introduced into the Pyrenees with the onset

of pastoral agriculture there.

However, as early as 1923, P. Bosch Gimpera asserted that the Pyrenean Culture and its pastoralistic economy could not be explained by means of new immigration from outside into the region and that it would be more likely that the Pyrenean Culture and the people associated with it are the result of the evolution of the indigenous Mesolithic Asturian element of the north of Spain.⁴ The Pyrenean Culture in having an indigenous appearance seemed to indicate that the local people had adapted themselves to cultural changes by assimilating elements from other cultures nearby but they had managed to preserve their own language and traditions.⁵ He added that this Pyrenean Culture expanded in Neolithic times not so much in the west where it did not go beyond Monte Gorbea in Vizcaya and the Sierra de Urbasa in Alava and Altos de Encía but from a nucleus in the western Pyrenees and Aragón eastwards to the northwest of Cataluña.⁶

As regards the stages of the Neolithic and their introduction into the Franco-Cantabrian region, they seem to have come in 3 steps. Firstly, the domestication of animals leading to pastoral agriculture. Secondly the introduction of the knowledge of arable agriculture i.e. the growing of crops and cereals etc. together with Cardial Ware pottery and thirdly the practice of constructing megalithic monuments like dolmens.

PASTORALISM AND ITS INTRODUCTION INTO THE PYRENEES.

In an effort to find out how and when the pastoralistic economy got under way in the Pyrenees it is necessary to go back to the period of 6000 B.C. to 5000 B.C. At this point, it is important to realize that occupation of the Pyrenean mountains and of some Pyrenean valleys is not a result of the spread of the pastoralistic society during the early Neolithic era but that this had already partially occurred during the late Mesolithic period. During the period from 6000 B.C. to 5000 B.C., the

climate in Europe was around 2° C higher than today as an annual average resulting in movements of population from lower lying areas to some places high up in the mountains considered by us today to be too cold for habitation. This means that in the Pyrenees we would find the population of that epoch living at an altitude too cold today for winter months. This short period of warm temperature is called the Climatic Optimum ⁷ and it was at around this time or shortly after it i.e. 5300 B.C. to 5000 B.C. when the higher Pyrenean prairies were beginning to be associated either with an incipient pastoral people or people who would later learn to domesticate animals and adopt a fully-fledged pastoral economy.

How then did pastoralism begin in the Pyrenees? This involves a discussion of the presence of sheep and goats in the region. Sheep and goats were once regarded as extinct in southern France after the late glacial period. Sheep could have been imported from outside which could suggest the arrival of new peoples in the region who could also have brought something of the Basque language with them. Admittedly, it is just possible that these people might have passed on some words which referred to shepherding practices but if this is the case these words could never really be found and the suggestion that Basque words today for animals like sheep, goats, lambs and rams etc. could originally have been foreign words is not convincing.

What makes the above suggestions very unlikely is that there are grounds for believing that sheep, goats, pigs and cattle are indeed native to southern France and, in particular, the south-west of France, the Pyrenees and Cantabria. It is important to realise at this point that during the Magdalenian era in the high valleys of the French Pyrenees, the goat was the major species hunted at the end of the Würm glaciation and at Upper Palaeolithic sites in Spain like Parpalló and Los Mallaetes, goats were a feature of the faunal remains. The point here is that it

seems that sheep, goats, cattle and pigs survived in the south-west of France, the Pyrenees and Cantabria because sheep bones were unearthed from the Mesolithic levels in the cave of Santimamiñe near Guernica in Vizcaya. Remains of sheep were found at the Mesolithic type-site of Sauveterre-La-Lémance north of the Garonne river in the Dordogne which is dated to the 7th millenium B.C. and the Mesolithic (pre-pottery) layers at Châteauneuf-Les-Martiques near Marseilles in the Rhône valley in Provence, dated to around the 6th millenium B.C. bones of sheep, goats, pigs and cattle are already present.⁸ Sheep remains have also been uncovered from Tardenoisian middens at Hoëdic and Téviec in southern coastal Brittany and dated to the end of the 5th millenium B.C.⁹ It appears that the sheep might have existed in a wild state for a long time in the Franco-Cantabrian area before pastoralism began there. They might have been hunted as one of the many sources of meat supply by the Mesolithic Azilian forest-dwelling folk of south-west France. The wild sheep although rare for several thousands of years together with the wild goat are animals which can adjust well to a dry atmosphere provided they can find sufficient food and both are at home in hilly and mountainous country.¹⁰ They are adaptable in their diet and the food then available for them during the late Mesolithic period was enough for them to survive and both sheep and goats were kept by proto-Neolithic peoples.

Cattle and pigs were reared slightly later - probably they became associated with man through raiding his crops. What narrows down the possibility of foreign groups infiltrating the Pyrenean area and bringing new species of cattle with them and possibly the knowledge of their domestication together with the names for these animals is that the remains of bovine animals like cows, bulls and oxen which have been found in the sites of the Pyrenean pastoralist society belong to the same type of cattle which the Azilian population used to hunt primarily

for meat i.e. there was no introduction of new varieties of cattle in the Franco-Cantabrian zone. Does this mean then that the Basque names for these animals i.e. behi - cow, zezen - bull, idi-- ox are indeed native to, at least, the Mesolithic world? Horned cattle like oxen and bulls etc. can live in naturally irrigated valleys and even in forests that are not too dense.¹¹ Bulls are depicted on cave walls which shows that they were around in the Franco-Cantabrian area in the last Ice Age however this is not sufficient to prove that the present-day names in Basque for bovine animals and sheep and goats have always been integral to Basque faunal vocabulary. We simply do not know, but it is certain that the names for these animals pre-date any of the later Indo-European incursions into the region in the early Iron Age or late Bronze Age¹² and the suggestion that the word ardi - sheep is from Indo-European (i.e. compare Latin - aries) is unlikely and has no foundation whatsoever.

As regards the introduction of pastoral agriculture into the Franco-Cantabrian region and how this was done, we do not have any indication of much change in the make-up of the population in south-west France from the end of the Magdalenian era down to the beginning of the pastoralist Pyrenean epoch. Hence, we have to suppose that the pastoral society in the western and central Pyrenean area was formed by elements of the preceding hunting society of the same territory who had applied the knowledge of domestication to the local animals which they had previously hunted. How did they receive the knowledge of the domestication of animals? There is some evidence that domestication of certain animal species which accompany the Neolithic, like cattle and pigs may have occurred independently in parts of Europe¹³ but it now appears that knowledge of pastoralist practices and slightly later that of farming was brought in by outside influences.¹⁴ This, however, did not require intrusions of vast numbers of pastoralist or agricultural colonists into the Pyrenees but rather this

could have been done by the transmission of new ideas through simple interaction between Mesolithic hunting communities and Neolithic peoples who had begun to expand into areas adjacent to the Franco-Cantabrian zone.

If, as suggested, the Basque language was grafted onto the native Mesolithic forest-hunting population by incoming Neolithic people practising either pastoralism or later agriculture in the early Neolithic period. (i.e. 5300-4000 B.C.) there seems to be very few archaeological signs of any newcomers into the Pyrenean region. Anthropologically and archaeologically the finds in the Basque Country are very simple, without any complications and relatively unmixed unlike the discoveries in other areas. If there had been new Neolithic intrusions into the Basque Country, these newcomers would have had to have been sufficiently powerful numerically and culturally to have been able to impose their language on the mountain people and the forest-dwelling people to the north.

References to a new culture level in the Franco-Cantabrian area like the Neolithic do not necessarily mean that a whole new people invaded the area, destroying, or overrunning the native inhabitants. In no case, do we see an innovation in tools or techniques which is not accompanied by materials of local traditions.¹⁵ These innovations could then have been introduced by perhaps long-distance contact with other peoples.

THE CHANGE FROM HUNTING TO PASTORALISM.

The change from a hunting society to a pastoralist society would have taken a long time for there could have been various economic stages intermediate between a hunting and food-collecting economy and a fully-fledged seasonal pastoralist economy. These stages could have involved no more than herding wholly or still partially wild flocks of sheep and goats over a large area.¹⁶ Also, here we have to consider what the Mesolithic Azilian hunting society would have been like. It would have been a very conservative and closed society and hence unwilling to accept

changes that might upset the balance of their social organization. It would also have been a stratified society where certain members of the social hierarchy would have acquired privileges and some tribes would have better hunting grounds than others. It was a society resulting from several millennia of having been dedicated to the same activity and there must have been tribes in the Pyrenees who were not prepared to accept this new way of handling animals. One possible instance of this reluctance could, indeed, be detected at the Mesolithic type-site of Mas d'Azil itself because here we have a Carbon 14 date for an Azilian burial of 2120 B.C. which is fairly late for the Mesolithic. We do not know which were the first valleys to adopt the new pastoralist way of life. Probably it was received simultaneously in several valleys and gradually imitated by other people in other valleys as soon as the results of the new experiment were seen but when exactly and from where was this knowledge of domestication of sheep diffused to the Franco-Cantabrian area or more specifically to the Pyrenees? The answer to this question could possibly be found on the Mediterranean coast of Provence near Marseilles in the early 6th millenium B.C. This was a favourable time to attempt to domesticate sheep and the first people who were able to do this there were the Castelnovians, a Mesolithic people named after the type-site of Châteauneuf-les-Martiques mentioned earlier.¹⁷ These people perhaps undertook this to preserve a source of game which was tending to disappear and which tolerated the proximity of man.

Climatic conditions played their part in facilitating the domestication of sheep and other local animals for at around 5800 B.C., the climatic period known as the Boreal Phase which had lasted from approximately 6500-5800 B.C. and which was marked by a dry and continental climate, changed to a more moist and more oceanic type of world called the Atlantic Phase which lasted from 5800 down to roughly 3000 B.C. This latest phase

had less marked seasonal temperature changes, milder winters and warm, moist summers. The sea level rose to the present level in the Mediterranean and this meant more water.¹⁸ This made it easier to begin breeding sheep for there was now abundant grass almost everywhere in the valleys and plains which had previously been arid and sterile.

During the Mesolithic earlier on the Castelnovian people, like almost all other groups at that time, had been hunters and fishers but the Boreal climate in the late Mesolithic caused a gradual transformation of their way of life. They went through various stages in this transformation i.e. from hunter-fisher-*proto*-Castelnovian to hunter-fisher-herdsman and Castelnovian then fisher-herdsman and *epi*-Castelnovian and by the beginning of the Atlantic period i.e. 5800 B.C. the Castelnovian herdsman had become Neolithic by engendering locally the Cardial Neolithic which was an exclusively pastoral culture.¹⁹

Thus, the peoples who lived here in southern France were able to adopt a relatively sedentary way of life, keeping their flocks near their living sites.

In Atlantic and inland regions to the north and west at this time forests covered the whole country apart from a few habitable coastal areas and the peoples inhabiting these forested zones in the south-west of France and other areas further away from the Rhône valley would have continued leading their traditionally Mesolithic life of hunting, fishing and food gathering. The further inland, the longer the older Mesolithic economy persisted. As the Mediterranean climate spread, so the Castelnovians could have expanded inland both northwards and westwards and they could have transmitted their knowledge of pastoralism indirectly to the plains of eastern Aquitaine bordering the Upper Garonne river and thence to the Pyrenean foothills and this may have triggered off the native pastoral culture along the western and central Pyrenees. The Azilian population

there would have received the knowledge of the domestication of animals and applied this knowledge to local sheep, goats and cattle which they probably already had in captivity.

This pastoral culture was a seasonally mobile economy and meant considerable intercourse between the mountains and the plains. These Pyrenean shepherds would go as far north as the Garonne river and even beyond it into the Dordogne and the Charente and in the south, they would go down to the Ebro, to regions like Las Bardenas and possibly cross the Ebro into the regions of Soria and La Rioja.

In France, the regions mentioned above, near or beyond the Garonne constitute a huge area of extension and correspond even today to the extension of the winter pastures of the Basque shepherds.

POSSIBLE CANDIDATES FOR NEOLITHIC VOCABULARY IN THE BASQUE LANGUAGE.

As regards the Basque language and its pastoral vocabulary, one cannot simply select words at random and assign them to the early Neolithic period when pastoralism first got underway in the region. Nor can one say that certain elements of the Basque pastoral lexicon were originally alien to the language and had been borrowed from the languages of unrelated Neolithic people inhabiting the territories adjacent to the Franco-Cantabrian zone. This is because comparison of words cannot be made due to the fact that these languages were submerged thousands of years ago by later folk-movements which brought the Indo-European languages into Europe.

However, as regards a pastoral society and the way in which it was organized both socially and religiously, there could be some curious remnants still tucked away inside the Basque language itself.

BONES, LYING AND DIVINATION.

In Basque today, there is a seemingly hitherto unnoticed similarity between 2 particular words - gezur - a lie and hezur - a bone. Admittedly, these 2 words represent the standardized forms today but, as always, there are dialectal variations for in Guipuzcoan and Souletin we find gizur for gezur and gizur probably gave rise to the form guzur in Vizcayan.²⁰ With reference to hezur - which is the Lower Navarrese and Labourdin form found in Joanes de Liçarrague's translation of the Gospels in 1571, we have the following dialectal variants - Vizcayan - azur, Upper Navarrese and Guipuzcoan - ezur, Souletin ezür and in the Roncal dialect - ẽzur. According to Michelena, the explanation of the variants of this word - hezur - bone could be based on any of the hypothetical proto-forms *ehazur, *enazur or *anezur.²¹ If so then it would make any supposed relationship between gezur and hezur much less likely so we must be on our guard against making any hasty conclusions.

However, assuming that there is some ancient etymological connection between these 2 words, what does it mean and how far back could this link extend?

The use of bones for determining whether someone is lying or not is associated with the practice of divination or, at any rate, it could call to mind this kind of ritual first of all. The use of bones in divination is world-wide. Astragalomancy means divining by means of small bones like the vertebrae. The cracks in or the formation of the shoulder-bone or blade-bone of a sacrificed animal still give Mohammedan diviners clues with which to read the future.²²

Both human and animal bones were employed in divination and what is interesting here in the context of a pastoral society in Britain, is that divination by the blade-bone of a sheep was formerly well-known. Scottish

seers sometimes used the blade-bone of a black-sheep in divination.²³

All the flesh had first to be scraped off it.

In the Isle of Lewis, the seer read the future from marks on the bone, holding it lengthwise before him in the direction of the island's greatest length.

In some parts of the Scottish highlands, 2 persons were needed for the divination, one to hold the bone over his left shoulder and the other to look through the thin part of the broad end, where the answers to the enquirer's questions could be read by those who knew how to interpret them.

In Africa, thieves are still detected, lost goods found and problems solved by the ceremony of "throwing the bones". Different kinds, usually those of domestic or wild animals, are used to represent individuals or spirits or the forces of nature, and are thrown like dice. The answers to the enquiries are read from the manner of their fall by those versed in such matters.²⁴

If there is any relationship between the 2 words with gezur deriving from hezur then owing to the importance of the sheep-bone in the ritual of divination, it could be better to assign it tentatively to the Neolithic when sheep and shepherding formed the mainstay of the Pyrenean communities. As to how far back the link could go, it could, indeed, be only comparatively recent i.e. within the last 3000 years when metals came to be known for it seems that the use of iron or other metals was forbidden for in Scotland, all the flesh had to be scraped off the bone without the aid of iron; if a knife or any other steel or iron object touched it during this process, its magic was lost.²⁵

We cannot be sure that there is any connection between the 2 words. All the reasons in the world stressing the importance of bones in divination do not and can not suffice to prove any authentic relationship. Indeed,

even if the words are related to each other, this need not be due to the practice of divination but rather because of some other reason. It is just that divination is the first word which could bring the concepts of lying and bones together.

It may be foolish to assign the relationship to the Neolithic perhaps because this is too far back in time. On the other hand, we may not be going back far enough because bones with notches in them perhaps for either counting or divination or predicting the future have been found in the Basque Country at Upper Palaeolithic levels.²⁶

There is one further detail involved in divination - namely the prominence of the skull in bone magic. The Basque word for skull or cranium is burhezur or literally "head-bone." The idea could have been that it was more likely than any other bone to be the soul-seat but this could be a relatively recent notion in Europe for the identification of the skull with the soul-seat is a characteristic feature of the Celtic mentality and which gave rise to the cult of the human skull. In Ireland, an oath sworn upon such a relic was specially binding, particularly if it was taken to clear a man of an accusation and to lie in such circumstances was to risk sudden death or some other terrible consequence.²⁷

One still cannot prove that the link between these 2 words is only recent due to any Iron Age Celtic influence in the Franco-Cantabrian area because there is evidence uncovered from Mesolithic burial sites in western Europe which would suggest that there could have been a cult of human skulls as early as the Mesolithic era.²⁸

THE INTRODUCTION OF FARMING.

Up until now, the introduction of pastoralism alone has been under discussion and we have seen that it is unlikely that this involved any

major new ethnic shifts into the Franco-Cantabrian area. However, the spread of arable agriculture is thought to have occurred slightly later in the region i.e. 4500 B.C. to 4000 B.C. and it is important to realize here that pastoralism and agriculture did not go hand in hand for at first, the pastoral society was fully divorced from agriculture.²⁹

Here, with the spread of farming into Europe from the Near East in the 7th and 6th millennia B.C., we could be dealing more with movements of new farming peoples from the south-east to the north-west of Europe³⁰ and once more we have to look at any possibilities of new intrusions into the south west of France - intrusions which could have brought something of the Basque language with them from outside.

The adoption of farming in Europe visualizes a series of frontier situations where farming colonists came face to face with hunter-gatherers.³¹ In much of south-eastern Europe, notably the Danube valley and the Upper Elbe, Vistula and Rhine rivers, farming indeed seems to have spread via the intrusions of new populations.³²

However, although the new economy might have been introduced into western Europe by migrating people, it is also thought that it might have been spread by stimulus diffusion i.e. by passing on farming techniques from one community to the next without significant movements of people³³ and it seems that in the context of the Franco-Cantabrian zone, knowledge of farming is more likely to have spread by means of this method of diffusion rather than necessitating wholesale migrations into the region.

From where was it diffused? There is early evidence of cereal cultivation at around 5320 B.C. in southern France.³⁴ This western Neolithic area along the Rhône valley down to the coast shows an increasing spread of farming economies inland from the Mediterranean coast and they are largely attested by a simple material culture with stone and flint-edged

tools and pottery styles.

Although the first signs of farming influences in the Franco-Cantabrian region can be detected in the period from 4500 to shortly before 4000 B.C., it was not until the appearance in southern France of the culture known as the Chassean (named after Chassey - a central French type-site) at around 4000 B.C. when settled communities, with a strong dependence on both animal-herding and agriculture came to characterize the region. A widespread cultural uniformity was created from the beginning of the 4th millenium B.C. by this single cultural group and it extended from the Pyrenees to Liguria.³⁵ It seems to have been a uniformity based on exchange systems i.e. involving diffusion of goods and ideas but not colonization.³⁶

Any infiltrations into the south-west of France and the Pyrenees could only have constituted small bands during the 5th and 4th millennia B.C. because of the geographical nature of the surrounding areas. The geographical nature of these areas around the Pyrenees could have constituted a protective barrier for the ancestors of the Basques against any possible absorption by outsiders or the imposition of their language.

As regards possible candidates for invading or infiltrating into south-west France, we know from archaeological evidence that Chassean pottery styles spread up the Rhône valley as far as Switzerland and up the Saône river into Central³⁷ France starting from around 3800 B.C.³⁸ Chassean colonization whether by transmission of ideas or by population, passed up the Loire to Brittany.³⁹ If we look to the north of the Pyrenees, we see that the main river from which we can arrive at the Pyrenees is an Atlantic river - the Garonne. Now, the appearance of the area of south-west France during the late Mesolithic era would have been much the same as today except for some important differences. The area

would have been greener and much more heavily forested than today - the left bank of the Garonne was covered by dense forests and seemed to be an impenetrable barrier for newcomers into south-western Europe like continental Neolithic farmers from the Rhône valley or other migratory agriculturalists coming up the Danube into eastern and central France. Both these groups could have barely touched on the region at around 4000 B.C. or shortly before. These groups, being agriculturalists, would have been searching for open and well-watered areas where there were possibilities of growing crops. Even if they had managed to get through this densely forested area, there is a factor very seldom taken into consideration by Spanish and French scholars and it is that in ancient times, from Bordeaux down to Bayonne, there was a sand desert difficult for migratory peoples to cross over. Today, this region is a pine forest but this is a relatively modern and man-made phenomenon dating from the last century. These wandering farmers might have been able to get as far as the region of Buch and Arcachon but no further. Even if they had succeeded in crossing through Les Landes, the western and central Pyrenees would have held no attraction for them because apart from being inhabited by pastoral peoples who would defend their mountains, the western and central Pyrenees are characterized by small, narrow and deep valleys, ill-suited for any widespread agriculture and the plains just to the north of them would have been too vulnerable to attacks from the by-now pastoral mountain people who would not allow their traditional winter pastures down on the plains to be taken from them and converted to agriculture. Only small numbers of people with the knowledge of agriculture could have penetrated this region and this knowledge could have been picked up by either those communities on the low-lying forested areas who still practised a Mesolithic hunting and food-gathering existence or else the agriculturalists came into contact with people from the Pyrenean mountains who had already adopted pastoralism and diffused farming techniques to them when they came down onto the plains in the winter months.

However, hunting to pastoralism is much easier than hunting to agriculture for clearly hunters would find the labour of the fields little to their liking.⁴⁰

We see from the dating of agricultural sites in south western France that there seemed to have been a progressive expansion of agriculture from the south-east towards the western areas and northern areas i.e. from Châteauneuf-les-Martiques at around 5800 B.C. to Gazel in Languedoc dated to before 4800 B.C. to Baume to Montclus on the Rhône valley further north and St. Martin du Touch further west on the Garonne river near Toulouse both before 4,400 B.C. and further north we have Roucadour - a site north-east of the Dordogne dated to before 4300 B.C. Hence, arguments for the introduction of agriculture into the Basque Spanish Region favour a continental origin.

As far as the approaches to the Spanish Basque Country in the south are concerned, some agriculture seems to have been introduced into the region near the Ebro river (i.e. southern Álava, southern Navarra and southern Aragón as far east as Lérida) after 3000 B.C. by Mediterranean peoples coming from the lower part of the Ebro river i.e. south-eastern Aragón and Cataluña.⁴² Indeed, the only way of reaching the present-day Basque Country or areas adjacent to it from the Mediterranean coast was and still is up the Ebro valley. These Mediterranean influences can be seen in the physical appearance of many Basques today in these warm, dry areas south of the Cantabrian mountain range and facing the Mediterranean area.⁴³ However, some of these influences might also have come from the Atlantic seaboard from Portugal up the Duero river to the Castilian meseta, and thence to Álava. The type of agriculture which was introduced had as a complement herding but the working of the land would have caused people to be more and more fixed to a particular territory. Yet, there are very few signs of Neolithic penetration in the Basque area in Spain and the very few

agricultural settlements which we have in the region seem to be located in secondary or marginal territories of the Basque nucleus of the mountains. We only have a few sites like Arenaza in Vizcaya and Los Husos in southern Alava which can be said to be Neolithic and another possible site in southern Navarrawhich is at present under excavation and besides these sites there are some Neolithic traces of habitation in some caves i.e. the Neolithic levels in the cave of Santimamiñe in Vizcaya, Lumentxa and Bolinkoba and on the French side in the caves of Ermittia, Uriogaina, Isturitz and Mouligna.⁴⁴

Up until now, the archaeological emphasis in the work done in the Basque Country has been on the study of flint and pottery. Working of flint might be a good base to see how far the culture of the south is connected with the culture of the mountains. Pottery on the other hand might be a good indication for outside influences. These influences so far seem to come from very different places i.e. from the continent i.e. Cardial Ware pottery showing contacts with the Rhône Valley in France, from Eastern Iberia and from western Iberia but as long as we find local flint work, we can assume that the pottery is a result of trade and not due to the establishment of any new Neolithic people in the region.

At the end of the Neolithic at around 2000 B.C., there was still a relatively homogeneous western Pyrenean people along the Pyrenees, on the plains of Aquitaine perhaps as far north as the Garonne and in the south down to the Ebro although here, as time passed, contacts with the Mediterranean populations along the Ebro multiplied. However, there was, it seems, very little penetration by Mediterranean types into the mountainous northern parts of the Basque Country.⁴⁵

THE NEOLITHIC CASE FOR THE SIMILARITY BETWEEN (H)ERRI & ERRE.

As regards the opening up of new territory for slash-and-burn agriculture, prairie or steppe with its tough grass-sod cover is so difficult to break up with primitive agricultural implements that the soft soil of woodlands is preferred even though this involves the painstaking process of felling large numbers of trees with stone hand-axes or the elimination of as much of the tree canopy as possible by fire to create either new space for pasture or to allow access of light to the cleared soil for growing crops and cereals. The subsequent ash would have been a rich fertilizer for the growth of new crops.

The mention of burning again recalls the concepts of herri - land territory, country and erre - to burn discussed in the previous chapter but if there does exist an etymological relationship between these words it could equally be assigned either to the pastoral or the agricultural Neolithic era.

With the beginnings of the pastoral Pyrenean Culture there were not only more possibilities of securing the needs of society but also there was a new road opened for the increase of the family with the knowledge of the domestication of animals.

If before hunting only had been the limitation of the family for thousands of years, now to increase the resources of the tribe was the only way to increase the family for now they needed more men to handle the animals. When the prairies of the Pyrenean valleys and the nearby mountains were not enough to support the increase of cattle, the Pyrenean man was obliged to go to other valleys and mountains each year clearing away more and more forest by burning it in order to convert more land into prairies for pasture. This constant burning of the mountains is still practised today by shepherds in the Basque Country in the month of October. In this way, each generation would cover more and more territory with the

young men settling their families in the newly-cleared valleys. Hence, here too herri - could originally have designated a patch of land burnt (erre) either for new pasture land or later on for cultivation of cereals or harvesting of crops and indeed the Basque word for - hamlet or village - baserri could also originally have meant a space cleared in the woodlands (i.e. baso) ~~by~~ burning.

This constant firing of mountain forests might even have given the name to the Pyrenees. The Greeks were the ones who gave these mountains the name - Pyrenees. In Greek, (Pyr) - means 'fire' and the name Pyrene was already in use in the 6th century B.C. It is more likely that the Greeks translated into their own language an already existant tradition among seamen than to see in the word Pyr- an unknown indigenous Pyrenean word with the base pir- which the Greeks intentionally transliterated into Pyr.

The mountains on fire might have been seen from very far away and in some epochs, might have served as a light guidance for Mediterranean ships crossing the Bay of Biscay on their way to Brittany and the British Isles in search of tin and other metals.

One could add here the arguably fantastic association of zur - wood with su - fire since during the Neolithic, the concept of wood would also have been constantly linked to that of burning but this could again be rather too far-fetched.

HAITZKOR.

As mentioned, the process of forest clearance required the use of polished stone hand-axes and there is evidence of axe-heads having been traded over considerable distances during the Neolithic Age.⁴⁷ Here one is tempted to mention the Basque word for axe - haitzkor and automatically call it a Neolithic word. This could be too hasty because traditionally

the Basque area has been a very conservative place in which new technical innovations and new religious ideas take a long time in becoming established i.e. Mesolithic communities survived down to 2120 B.C. in the central Pyrenees as at Mas d'Azil. Neolithic dolmens were still being erected in the region as late as 1000 B.C. Basque farm families still use some tools and utensils similar to those thought to have been used in prehistoric times i.e. women in mountain villages work with the Kaiku (itself not a native Basque word but from Latin caucus)⁴⁸ a hollowed-out wooden bowl with a handle in which they boil milk by heating flat stones in the fire and then dropping them into the bowl of milk.⁴⁹

The oldest Christian monuments in the region go back only as far as the 10th century A.D. and paganism is thought to have been flourishing as late as the 11th and 12th centuries A.D. in parts of Vizcaya and Guipúzcoa according to Aimeric Picaud, the 12th century Norman pilgrim.

Hence haitzkor although referring to an implement perfected in the Neolithic period, could only be a relatively recent word in its formation for stone tools were used in the Basque region long after the Bronze Age and Iron Age got underway there. It could be an early medieval creation in the language although a polished hand-axe has been uncovered from the Neolithic level in the cave of Santimamiñe in Vizcaya.⁵⁰

HARITZ and (H)EZKUR.

Whether or not the Basque word for an oak tree - haritz goes back to the Neolithic is something which we do not know. The oak tree is very important for the growth of a pastoral society because it is the main source of tannin for curing animal hides⁵¹ and it had been so in Western Europe up until the 15th century when sumac was introduced from the East. You can obtain tannin from the oak-galls which provide food and you get the oak-galls

from the bark of the tree or from the heartwood and even from the acorns. However, in view of this, one cannot latch onto features of the Basque floral world so central to pastoralism like haritz -oak and (h)ezkur - acorn and claim that these words are as old as the beginnings of pastoralism itself in the region.

THE MEGALITHIC RELIGION IN THE BASQUE COUNTRY.

Lastly there is a third phenomenon which occurred in the Basque Country during the Neolithic - the appearance of the megalithic dolmens. This again could suggest the intrusion into the region of foreign elements who could have brought with them a proportion of the vocabulary which we find today in Basque.

Some time after the spread of the pastoral way of life, a new religious way of life symbolized by these dolmens began to be adopted in the Pyrenees. Around 300 dolmens have been counted in the Spanish Basque Country and 110 more in the French Basque Region.⁵² Their appearance in the Pyrenees could tell us something about the expansion of the pastoral society there. We could not follow the spread of pastoralism without them for herders do not leave many traces behind them since they require only the minimum of tools and other material objects.

It seems that if the area of distribution of these megalithic dolmens coincides with the area of essentially pastoralistic societies, it could mean that megalithic construction was possible and attractive there because there was already a pastoral society there in existence. . . Megaliths are controversial being considered on the one hand the products of a native north-west European tradition and on the other hand the type fossils of a religion carried or diffused from the eastern Mediterranean.⁵³ If the megaliths were introduced into the area from outside then it could imply the introduction of some new economic ideas i.e. a more elaborate knowledge

of pastoral practices from birth control of animals to a better use of pasturage or the introduction of new domesticated animals and words designating these practices and animals but there is no evidence of this. Moreover, the grave goods in the tombs represent the contemporary material culture of the region, and not a set of new traits which could have been introduced with the concept of the tombs themselves.⁵⁴ Also, if outsiders did bring the megalithic dolmen tradition into the Pyrenees, we should have some distinctive linguistic traces in place-names in those areas where there is a predominance or concentration of dolmens and we do not find this.

If we look at the dates for these monuments in western Europe we might find some clues as to whether they are indeed independent inventions or not.

As regards material from the megalithic tombs in Brittany, from Carbon 14 dates it now seems clear that some of these chamber tombs were being built there slightly before 4000 B.C. but mostly during the early 4th millennium B.C. and the earliest British tombs are not much later. The possible dates from slightly before 4000 B.C. indicate that the megaliths here were being built a millennium before monumental funerary architecture first appeared in the eastern Mediterranean hence favouring an independent origin.⁵⁵

There are very few Carbon 14 dates from other regions but it seems that most megalithic tombs were being constructed in most areas including the Pyrenees in the early 4th and 3rd millennia B.C. and, as mentioned earlier, simple tombs were still being built in the Basque Region at around 1000 B.C.⁵⁶

As to whether the dolmens in the Basque Region can be regarded as evidence of non-Basque outsiders having arrived there, it must be said at this point that the dolmens in the Pyrenees are of a very simple rectangular type, characterized by the fact that the stone facing the east is shorter than the others.⁵⁷ This simplicity inherent in the Pyrenean dolmen could be an indication of a very early introduction perhaps even older than those of

Brittany or Great Britain. Also, the difference between the contents of the Basque tombs where there appears to be no offerings to the Gods could also suggest an earlier date.

However, if we had in the Basque Country and the Pyrenees a concentration of passage graves (that is stone chambers preceded by an entrance passage) we could then think that there was effectively a settlement of foreign people in the Franco-Cantabrian region because the passage graves are considered to be the tombs of a sea-trading people ultimately from the eastern Mediterranean. They could also have been prospectors looking for metals like gold. Their distribution close to the sea or along the coasts of Iberia, France and the British Isles would indicate that kind of people who would have had to have taken the first sea route to the north by sailing along the Atlantic shores from Lisbon, to the Bay of Biscay and thence to Brittany, Great Britain and Ireland before the direct sea route was discovered. The theory was that boats going north or south would have had contact with the people on the Basque coastline and could have influenced their language. However, we do not find these passage graves in the Basque area and the Pyrenees for instead we find these single rectangular burial chambers which was a type of grave that was taken by the native peoples of France.⁵⁹

However, dolmens which are called gallery graves because they consist of long chambers (which incidentally are not found in the Basque Country) and those single rectangular chambers in the Pyrenees point to a local use and this seems to support the view held nowadays that these 2 types of megaliths are the results of local invention in western Europe.⁵⁹

It now seems that the majority of the chamber tombs in western Europe could have been independent inventions in, at least, several areas where there was already a presence of rich Mesolithic communities i.e. as in Brittany) - communities which might have wished to assert their independence and territoriality against any small incoming bands of people.

At first, it was thought up to the second quarter of the 20th century that all the megaliths of Europe were built by people who had originated in the eastern Mediterranean particularly in Crete and the islands in the Aegean, but even in the days prior to Carbon 14 dating (i.e. pre-1949), it was becoming clear that the idea of for example, deriving great chamber tombs like Newgrange in Ireland from the domed subterranean tombs of Mycenae was chronologically impossible.⁶⁰

An explanation of the development of megalithic chamber tombs in different parts of western Europe without any influences from the eastern Mediterranean could involve 3 successive phases.

Firstly, there could have existed an early European Neolithic tradition of building houses of wood or stone. Secondly, these domestic structures could have been transformed later into tombs, still built of wood, turf or non-megalithic stone and thirdly this widespread Neolithic tradition could have been translated into megalithic architecture in separate areas of Europe that were thinly interconnected or, at any rate, subject to considerable diffusion of ideas through some long-distance contacts.⁶¹ The practice could have been transmitted to the Basque Country and the Pyrenees from areas nearby in France by small bands of people i.e. either from southern coastal Brittany via the Garonne river to areas in south-west France and thence to the western Pyrenees and Cantabria or from the Rhône valley to the eastern and central Pyrenees.

In the Basque Country, although the dolmens were collective tombs symbolizing the practice of inhumation, they could also have acted either as territorial markers or locations for ceremonies or even as totem poles or as the central point of areas from which their builders grazed their flocks of sheep or goats or later on tilled the soil to grow crops and cereals.

Finally, as regards the Franco-Cantabrian area, it now seems unlikely that we can attribute the appearance and spread of these simple rectangular burial chambers to any fresh immigration of Mediterranean peoples either from the west along the coast or from the south via the Ebro valley. It seems that the people who erected these constructions were elements of the preceding Mesolithic population in the Pyrenees, who had probably already become pastoralists and who had received this megalithic practice from areas nearer at hand in the late 4th millennium or early 3rd millennium B.C.

HARRI

The Basques today call these dolmens -trikuharriak. The 2nd element of this word, however, -harri ~~-stone~~ could only be a recent Indo-European occurrence in the language and could derive from Q Celtic -carraig stone or rock or could, at least, be cognate with the Indo-European proto-form - *karr(i). It could have come in during the Late Bronze Age with the arrival of the Urnfielders or later, during the Iron Age with the westward advance of the Hallstatt culture.

During the Neolithic Age, the Franco-Cantabrian zone, although protected to some extent from invasions by geography, was an area in which a complex picture emerged involving various mixtures of indigenous and intrusive culture traits. One could argue quite rightly that with each new economic or religious innovation, some new words must have come in to enrich the native Mesolithic vocabulary of Basque but these words cannot be detected. Just because the Neolithic era in the region is generally associated with the cult of sun worship, this does not mean that the Basque word for sun - eguzki is a Neolithic word brought in from outside. Basque has shown that it can construct new words to express new concepts and technical innovations by recourse to its own native stockpile of vocabulary. New words pertaining to the observation of natural cycles,

new religious beliefs and rites could have been coined equally in this way but we shall never really be certain for any linguistic evidence is by its nature timeless and unlocalizable.

It could be said that the whole history of the Basque region during the Neolithic era and indeed right up to today has been characterized by the indigenous population slowly adopting new economies like pastoralism and agriculture together with additional stylistic elements from outside while managing to retain their separate ethnic and linguistic identity.

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THE CONCLUSION.

The 3 chapters in this work have endeavoured to show that any search for words in Basque which could pre-date the age of metals need not be dismissed immediately as an exercise in lunacy.

In some ways, this work has been a cautious approach to this difficult problem of the language because with the absence of any written records before classical times, the world of the Stone Age is the realm of guesswork. In other ways, this treatment of supposedly ancient words in Basque has been largely a negative analysis in that many words, although possible remnants of Stone Age vocabulary, have also been equally discounted.

The Basque language has always exerted an almost hypnotic fascination upon European scholars for here, in western Europe, isolated on all sides by the all-too-familiar Romance languages and dialects, a distinctly non-Indo-European language of by now largely uncontested and unfathomable antiquity still lingers on.

The mystery surrounding the language today should not be stated as a failure to relate the language to any other tongue in the world alive or dead but rather it should be a question of investigating how far back the language goes in the region. When one accepts that it is not connected to any other known tongue and when one proceeds from that point in examining the vocabulary of the language together with the pre-history of the Franco-Cantabrian zone, one could possibly glimpse something of the nature and age of the Basque tongue.

However, any investigator of this enigma can so easily get carried away by latching onto long lists of monosyllabic words which relate to very natural and basic objects like su - fire, (h)ur - water, hortz - tooth, etc. and due to their simple composition assigning them automatically or even tentatively to some ancient -lithic age. This is a common error for the

traditional picture of the grunting cave man no longer holds today. In all probability, Stone Age man, whether Upper Palaeolithic, Mesolithic or Neolithic, was far more aware of his natural environment and able to describe it far more adequately than we can do today. One could cite the examples of how the Eskimos and the Tuaregs describe so intricately their respective worlds. It is becoming increasingly evident that, in many ways, Stone Age man's society and system of family relationships was far more sophisticated than our own today and the chances are that his language could have been both syllabically and grammatically more complex also. His language could most likely have been even polysynthetic in structure like the Eskimo languages of today or, at any rate, could have passed through some polysynthetic phase in the course of its evolution. Perhaps it is too hasty to say that traces of this supposed polysynthetism could be detected in the incorporating features of Basque synthetic verbal forms today but what we have in modern Basque must be a very watered-down version of what would have been a rich and complicated language.

There are signs that greater gender distinction in verbs could once have been very important as seen today in the 2nd person singular personal pronoun markers and also in the allocutive construction but this again is hypothetical.

As regards the possibility of later invasions bringing the language to the Franco-Cantabrian zone i.e. during the Neolithic, it must be said here that an invasion of people as evidenced by any sudden change in the material culture of a region does not necessarily betoken a change in the language spoken there. However, the reverse can be true: a new language may be introduced into a country and there is no apparent evidence for the appearance of any new people as shown by no new material or cultural traits in the archaeological record as in the case of Norman-French being introduced into England and Wales and the conquest of Brittany in the

5th, 6th and 7th centuries A.D. by settlers coming from south-west England and Wales. We do not speak Norman-French in England today although there is plenty of archaeological evidence of the material culture of the Normans in England i.e. Norman castles and forts. Conversely, the Breton language reflects Old Welsh or rather old British but no traces of the material culture of the 5th to 7th centuries A.D. have been found in Brittany of the arrival of these new speakers from Britain. Hence, we must be very cautious when asserting the antiquity of the Basque language in the region.

This work and everything in it was described as being a tentative study and the most that could be said about it is that one could suggest tentatively that a few words in the Basque language could possibly be remnants which could immediately pre-date the Neolithic i.e. the Mesolithic world might just be reflected but almost nothing concrete before that.

If there was a tendency at the end of the Mesolithic era to form linguistic groups from the mosaic of peoples of hunting habits then perhaps we could consider the Basque language as a manifestation of that tendency.

We could suggest finally that during the Mesolithic Age a group of languages belonging to a Basque family was spoken by the different hunting tribes in or near the Pyrenees. The subsequent spread of the pastoralist economy started in those hunting communities a tendency to use the lexicon and the grammatical structure of the Basque-type languages of each of the neighbouring tribes creating in this way a linguistic unification. This linguistic unification, in the association of the different tribes in a pastoral way of life gave rise to the predominance of one type of pastoral language, namely what we call Basque today.

If this is the case, the Basque dialects will not represent dialects derived from an original unified language like the Romance languages today.

in relation to Latin, or the Spanish dialects in relation to Castilian but just the opposite i.e. individual languages of the same family gradually converging into a unified form in parts of the vocabulary and grammatical structure as seen in the relationships between the grammars and vocabularies of Vizcayan, Guipuzcoan and Labourdin.

The Basque language could have been honeycombed with foreign elements even during the Neolithic Age because over the millennia there has always been constant contact and inter-dependence between the Pyrenean shepherds and the various peoples down on the plains or in regions along the Ebro valley or near to or north of the Garonne. Hence, the Basques and their language could never really have been isolated since the beginnings of pastoralism in the region. However, it seems that the key to their survival is that there has always been a nucleus or several nuclei interspersed throughout the mountain valleys which have been able to remain sufficiently independent or, at least, have been able to preserve the necessary vitality to absorb or keep any new infiltrators at bay or recuperate areas which might have fallen to foreign elements or had been under the pressures or influence of foreign cultures for some periods of time.

Lastly, when looking at etymologies of Basque words and determining how old they are, the language may be the key to understanding the world of the Basques but it may be as well to link it with the archaeology and anthropology of the region for right in the middle of the greatest concentration of archaeological sites and finds in Europe in the Franco-Cantabrian zone we still have a mysterious language whose origins cannot yet be accounted for.

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